TEST REPORT

REPORT NUMBER: 102715874COQ-001
ORIGINAL ISSUE DATE: October 12, 2016

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

RENDERED TO

Talissa Décor
850 Magnetic Drive
Toronto, ON. TM3J 2C4

PRODUCT EVALUATED: RM24 Polystyrene Ceiling tile
EVALUATION PROPERTY: Surface Burning Characteristics

Report of testing RM24 Polystyrene Ceiling Tile to the applicable requirements of the following criteria: ASTM E84-15b, *Standard Test Method for Surface Burning Characteristics of Materials.*

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REVISION SUMMARY

2 Introduction

Intertek Testing Services NA Ltd. (Intertek) has conducted testing for Talissa Décor, to evaluate the surface burning characteristics of RM24 Polystyrene Ceiling Tile. Testing was conducted to the standard methods of ASTM E84-15b, *Standard Test Method for Surface Burning Characteristics of Materials*.

This evaluation began October 11, 2016 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 September 26, 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 ± 3ºC (73.4 ± 5ºF) and 50 ± 5% relative humidity.

The sample material consisted of 0.125 in. thick by 19 ½ in. wide by 19 ½ in. long extruded polystyrene with antipirene additives, and was identified as “RM24 Polystyrene Ceiling Tile”.

For this trial run, 19 ½ in. wide by 24 ft. length of sample material was placed on the upper ledge of the flame spread tunnel. The sample material was supported by ¼ in. steel rods spaced every 24 in. and 20 ga. 2 in x 2 in galvanized steel netting spanning the upper ledge of the flame spread tunnel. A layer of 6 mm reinforced cement board was placed over top of the sample material, the tunnel lid was lowered into place, and the samples were then tested in accordance with ASTM E84-15b.

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 index is as follows:
(Index rounded to nearest 5)

Sample Material	Flame Spread	Flame Spread Index
RM24 Polystyrene Ceiling Tile	6	5

(B) Smoke Developed

The areas beneath the smoke developed curve and the related indexes are as follows:
(For smoke developed indexes 200 or more, index is rounded to the nearest 50. For smoke developed indexes less than 200, index is rounded to nearest 5)

Sample Material	Smoke Developed	Smoked Developed Index
RM24 Polystyrene Ceiling Tile	30	30

(C) Observations

During the tests, the sample surface ignited at approximately 1 seconds; the flame began to progress along the sample until it reached the maximum flame spread.

6 Conclusion

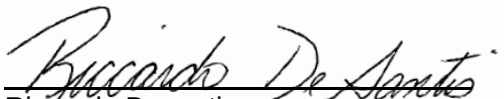
The sample of 0.125 in. thick RM24 Polystyrene Ceiling Tile submitted by Talissa Décor, exhibited the following flame spread characteristics when tested in accordance ASTM E84-15b, *Standard Test Method for Surface Burning Characteristics of Materials*.

Sample Description	Flame Spread Index	Smoked Developed Index
RM24 Polystyrene Ceiling Tile	5	30

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: 
Riccardo Desantis
Manager – Building Products

APPENDIX A

DATA SHEETS

ASTM E84-15b DATA SHEETS

ASTM E84

Client: Talissa Decor
Date: 10 11 2016
Project Number: 102715874
Test Number: 1
Operator: Greg Philp

Specimen ID: 0.125 in. thick by 19 1/2 in. by 19 1/2 inrDecorative Foam Panels

TEST RESULTS

FLAMESPREAD INDEX: 5

SMOKE DEVELOPED INDEX: 30

SPECIMEN DATA . . .

Time to Ignition (sec): 1
Time to Max FS (sec): 169
Maximum FS (feet): 1.3
Time to 980 F (sec): Never Reached
Time to End of Tunnel (sec): Never Reached
Max Temperature (F): 502
Time to Max Temperature (sec): 587
Total Fuel Burned (cubic feet): 44.00

FS*Time Area (ft*min): 12.1
Smoke Area (%A*min): 36.3
Unrounded FSI: 6.2
Unrounded SDI: 30.4

CALIBRATION DATA . . .

Time to Ignition of Last Red Oak (Sec): 42.0
Red Oak Smoke Area (%A*min): 119.3

TESTED BY

REVIEWED BY

ASTM E84-15b DATA SHEETS

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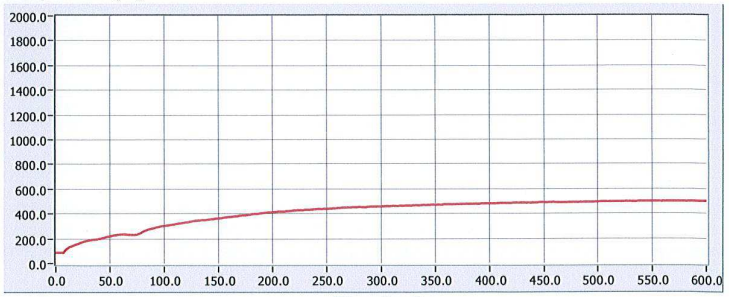
FLAME SPREAD (ft)

Smoke (%A)

Temperature (°F)



Time (sec)

600

REVISION SUMMARY

DATE	PAGE(S)	SUMMARY
October 12, 2016	All	Original Issue Date