

Intertek

TEST REPORT

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**ASTM E648
Standard Test Method for Critical
Radiant Flux of Floor-Covering
Systems Using a Radiant Heat Energy
Source**

Reward Prefinished Engineered Hardwood Flooring; ID:
REW1265PWOV

Project No. 101878070SAT-002B

November 24, 2014

EVALUATION CENTER
Intertek Testing Services NA Inc.
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Elmendorf, Texas 78112

Prepared for:
Galleher Corp.
9303 Greenleaf Ave
Santa Fe Springs, CA 90670

TEST REPORT

Sample Received: October 29, 2014
(This specimen was received in good condition.)

Test Date: November 04, 2014

Sample Conditioning: 69.8±5.4°F and 50±5% relative humidity

Sample Identification

Reward Prefinished Engineered Hardwood Flooring; ID: REW1265PWOV

Description

Reward Prefinished Engineered Hardwood Flooring; ID: REW1265PWOV; Color: Provence Verdon; Top Layer: European Oak; Base: Birch & Eucalyptus plywood, Coating: UV Urethane

Sample Preparation

The samples were sent directly by the client. Samples were not independently selected for testing by Intertek. Samples were put together to create the required test sample size, no adhesives nor other joining material used in this process.

Environmental Conditions: 72-73°F and 60-62% r.h.

This Test Witnessed by: n/a

Test Overview

This procedure provides a way of measuring *critical radiant flux* (the level of incident radiant heat energy on floor-covering systems at the most distant flame-out point, reported as W/cm²) of horizontally mounted attic floor insulation exposed to a flaming ignition source while being exposed to radiant heat energy from a panel with approximately a 30° angle from the horizontal. The radiant flux ranges from 1.08 W/cm² at the 100 mm mark to 0.12 W/cm² at the 900 mm mark.

Test Procedure

At least three specimens shall be tested. The specimens are conditioned at 69.8 ± 5.4°F and a relative humidity of 50 ± 5 % for a minimum of 48 hours. Following the ASTM E648 calibration procedures, the first specimen was loaded into the test chamber. After a 5 minute pre-heat time, the pilot flame was placed into contact with the specimen at the 0 mm mark. This pilot flame is to remain in contact with the specimen for 5 minutes, then removed. If the specimen

does not propagate flame during the 5 minute pilot flame contact, then the test is terminated. For specimens that do propagate flame, the test is continued until the flame goes out. The distance to the farthest flame-out point is noted, which is then used to determine the critical radiant flux, based on a radiant heat energy flux profile curve of the apparatus obtained during calibration.

Test Results

ASTM E 648

Specimen	1	2	3
Maximum Distance (mm)	431	458	455
Time to Max. Distance (min.)	22:41	23:51	22:28
Critical Radiant Flux (W/cm²)	0.45	0.40	0.41
Time to All Flame Out(min.)	22:41	23:51	22:28

***Data below 100mm is not available. (Radiant Flux at 100mm =1.03 W/cm sq.)
It is not part of the test standard procedure to record radiant flux values below 100mm.
No ignition

Observations (min: sec)

Run No.	Smoking	Discolored	Ignition
1	0:58	3:16	5:07
2	1:08	3:03	5:04
3	0:46	3:49	5:03

**Average Critical Radiant Flux
(W/cm²)= 0.42**

Standard deviation = 0.02

Coefficient of variation = 5.79

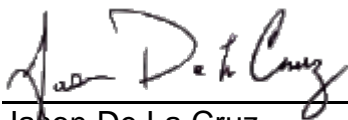
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Technician Team Leader

November 24, 2014

Reviewed and approved:



Jason De La Cruz
Project Engineer

November 24, 2014

REVISION SUMMARY

DATE	SUMMARY
11/24/2014	Original Issue. No Revisions.