TEST REPORT

REPORT NUMBER: 102402274COQ-002
ORIGINAL ISSUE DATE: December 24, 2015

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

RENDERED TO

Decospan NV
Industriezone Grensland
Lageweg 33
Menen 8930 BEL

PRODUCT EVALUATED: White Oak Veneer and MDF Panels
EVALUATION PROPERTY: Surface Burning Characteristics

Report of testing a White Oak Veneer and MDF Panels for compliance with the applicable requirements of the following criteria: ASTM E84-15a, *Standard Test Method for Surface Burning Characteristics of Materials*

1 Table of Contents

2 Introduction

Intertek Testing Services NA Ltd. (Intertek) has conducted testing for Decospan NV, to evaluate the surface burning characteristics of White Oak Veneer adhered to MDF panels. Testing was conducted in accordance with the standard methods of ASTM E84-15a, *Standard Test Method for Surface Burning Characteristics of Materials*.

This evaluation began December 24, 2015 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 samples were received at the Evaluation Centre on December 21, 2015.

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 ± 3°C (73.4 ± 5°F) and 50 ± 5% relative humidity.

The sample panels measured 24 in. wide by 8 ft. long by ¾ in. thick and consisted of a White Oak Veneer adhered to ¾ in. thick MDF.

For this trial run, three 8 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 6mm 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 ASTM E84-15a.

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. This information is plotted on a graph (flame spread curve).

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)

Sample Material	Flame Spread	Flame Spread Index
White Oak Veneer adhered to MDF	97	95

(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
White Oak Veneer adhered to MDF	69	70

(C) Observations

During the test, the sample surface ignited at approximately 52 second and the flame began to progress along the sample until it reached the maximum flame spread.

6 Conclusion

The samples of White Oak Veneer adhered to ¾ in. thick MDF, submitted by Decospan NV, exhibited the following flame spread characteristics when tested in accordance with ASTM E84-15a, *Standard Test Method for Surface Burning Characteristics of Materials*.

Sample Material	Flame Spread Index	Smoke Developed Index
White Oak Veneer adhered to MDF	95	70

The conclusions of this test report may not be used as part of the requirements for Intertek product certification.

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 E84-15a DATA SHEETS

ASTM E84

Client: Decospan NV
Date: 12 24 2015
Project Number: 102402274
Test Number: 1
Operator: Greg Philp

Specimen ID: White Oak Veneer adhered to 3/4 in. thick MDF

TEST RESULTS

FLAMESPREAD INDEX: 95

SMOKE DEVELOPED INDEX: 70

SPECIMEN DATA . . .

Time to Ignition (sec): 52
Time to Max FS (sec): 236
Maximum FS (feet): 19.0
Time to 980 F (sec): 236
Time to End of Tunnel (sec): 238
Max Temperature (F): 1232
Time to Max Temperature (sec): 435
Total Fuel Burned (cubic feet): 45.00

FS*Time Area (ft*min): 144.6
Smoke Area (%A*min): 90.9
Unrounded FSI: 97.3
Unrounded SDI: 69.0

CALIBRATION DATA . . .

Time to Ignition of Last Red Oak (Sec): 45.0
Red Oak Smoke Area (%A*min): 131.8

Tested By

Reviewed By
RD

ASTM E84-15a DATA SHEETS

Project No: 102402274

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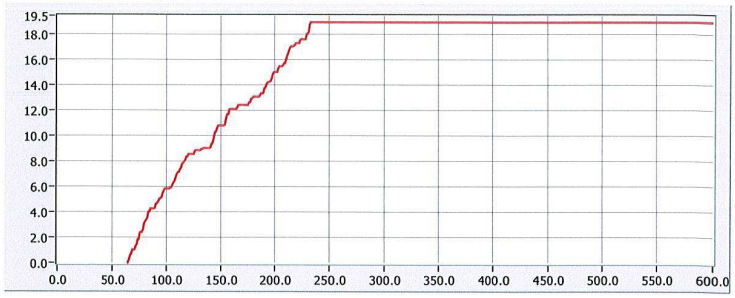
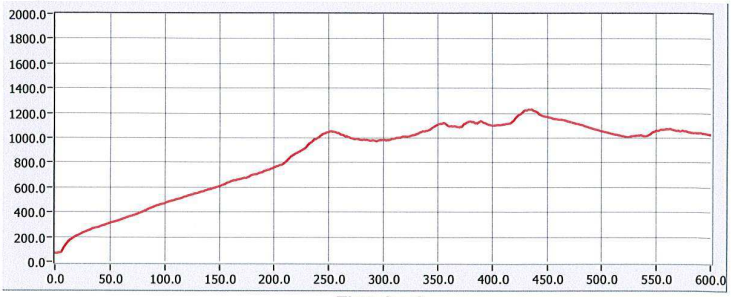
FLAME SPREAD (ft)



Smoke (%A)

Temperature (°F)



Time (sec)

600

RD

REVISION SUMMARY

DATE	PAGE	SUMMARY
December 24, 2015	All	Original Issue Date