

TEST REPORT

FOR

CFP Cladding & Decking

24 Kerr Crescent
Puslinch, ON N0B 2J0
CANADA

Standard Test Method for Surface Burning Characteristics of Building Materials ASTM E84 – 16

Test Report No: FH-2732-1

Assignment No: H-1289

Test Date: 03/21/2017

Report Date: 05/19/2017

Subject Material: "CFP Thermowood Ash"

Prepared by: 

Michael J. Rizzo
Senior Test Engineer

Reviewed by: 

Robert J. Menchetti
Director, Laboratory Facilities and Testing Services

The results reported in this document apply to specific samples submitted for measurement. No responsibility is assumed for the performance of any other specimen. The laboratory's test report in no way constitutes or implies product certification, approval or endorsement by this laboratory. This report may not be reproduced, except in full, without the written approval of the laboratory.

TEST REPORT REVISION HISTORY:

DATE	SUMMARY
May 19, 2017	Original issue date. Original NGCTS report FH-2732-1.

INTRODUCTION:

This report presents the results of a specimen tested in accordance with the requirements of ASTM E84-16a Standard Test Method for Surface Burning Characteristics of Building Materials. This test method is also published under the designations UL 723 and NFPA 255.

The purpose of this test method is to determine the relative behavior of the material by observing the flame spread along the specimen. Flame spread and smoke developed indexes are reported. However, there is not necessarily a relationship between these two measurements.

This standard is used to measure and describe the response of materials, products, or assemblies to heat and flame under controlled laboratory conditions. It should not alone be used for fire hazard or fire risk assessment of the materials, products, or assemblies under actual fire conditions.

TEST SPECIMEN:

The test specimen was submitted for testing to NGC Testing Services (NGCTS) directly by CFP Cladding & Decking, of Puslinch, Ontario. The test specimen was identified by the client as:

CFP Thermowood Ash

The test specimen was received in good condition by NGCTS on March 15, 2017. The test specimen was selected by the client and was submitted as four (4) pre-constructed decks, each made up of four (4) nominally 0.8 in. thick by 5.5 in. wide by 72 in. long boards.

Upon receipt, the test specimen was placed in a conditioning room where it remained in an atmosphere of 73.4 ± 5°F and 50 ± 5% relative humidity for 6 days to condition to constant weight prior to testing.

MOUNTING METHOD:

The (4) specimen decks were placed end-to-end, directly on the tunnel ledges, and butted tightly together to achieve the required test specimen length. No additional support was required. Non-combustible, fiber-reinforced cement board (1/4 in. thick) was placed over the test specimen decks as lid protection.

TEST RESULTS:

The test results, computed on the basis of observed flame front advance and electronic smoke density measurements are presented in the tables below.

The reported flame spread and smoke developed indices, as presented below, are the computed comparison to the standard calibration materials – mineral fiber-reinforced cement board and select grade red oak flooring. The cement board is used to establish relative 0 values for flame spread and smoke developed; the red oak flooring is used to establish relative 100 values for flame spread and smoke developed.

<u>TEST NO.</u>	<u>MATERIAL TESTED</u>	<u>SIDE EXPOSED</u>	<u>SUPPORT</u>	<u>CALCULATED FLAME SPREAD</u>	<u>CALCULATED SMOKE DEVELOPED</u>	
1	CFP Thermowood Ash	Symmetrical	Self-Supporting	40.47	200.49	
FLAME SPREAD INDEX * SMOKE DEVELOPED INDEX*						
	<u>MATERIAL TESTED</u>	<u>SIDE EXPOSED</u>	<u>SUPPORT</u>	<u>INDEX *</u>	<u>INDEX*</u>	
	RED OAK FLOORING	FINISHED	SELF-SUPPORTING	100	100	
	REINFORCED CEMENT BOARD	SYMMETRICAL	SELF-SUPPORTING	0	0	
1	CFP Thermowood Ash	Symmetrical	Self-Supporting	40	200	
				<u>CLASSIFICATION</u>	<u>FSI</u>	<u>SDI</u>
* Flame Spread / Smoke Developed Index is the result (or the average of the results of multiple tests), rounded to the nearest multiple of 5. Smoke developed results in excess of 200 are rounded to the nearest multiple of 50.				CLASS A or I	0 - 25	0 - 450
				CLASS B or II	26 - 75	0 - 450
				CLASS C or III	76 - 200	0 - 450

Test Specimen	Flame Spread Index (FSI)	Smoke Developed Index (SDI)
CFP Thermowood Ash	40	200

ADC DRAFT (IN. H2O) 0.080
 GAS PRESS. (IN. H2O) 0.288
 GAS VOL (CF) 49.79
 BTU/cf 1018
 SHUTTER (IN.) 3.00
 TEMP. 13' BURIED 110 F

Flame Spread: 40.47
 Area under Flame Curve (ft-min): 78.58

TEST#: FH-2732-1 DATE: 3/21/2017

TEST METHOD: ASTM E84-16

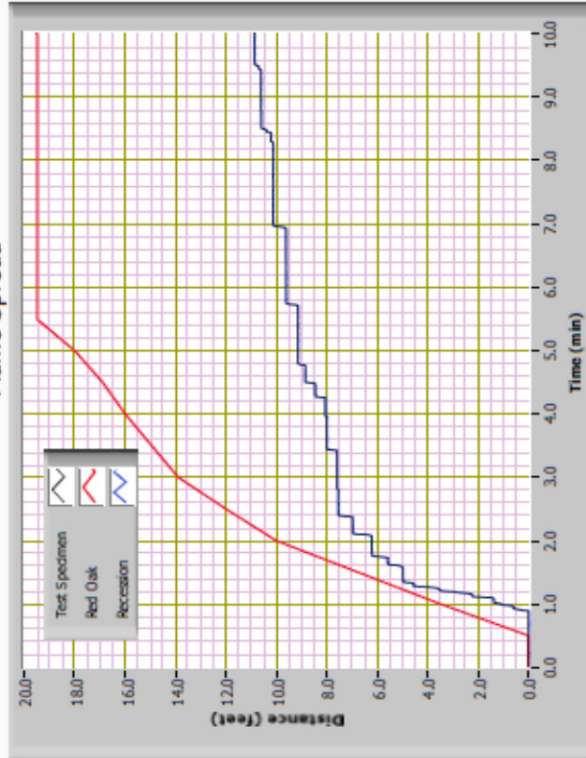
CLIENT: CFP Cladding & Decking

PROJECT#: H-1289

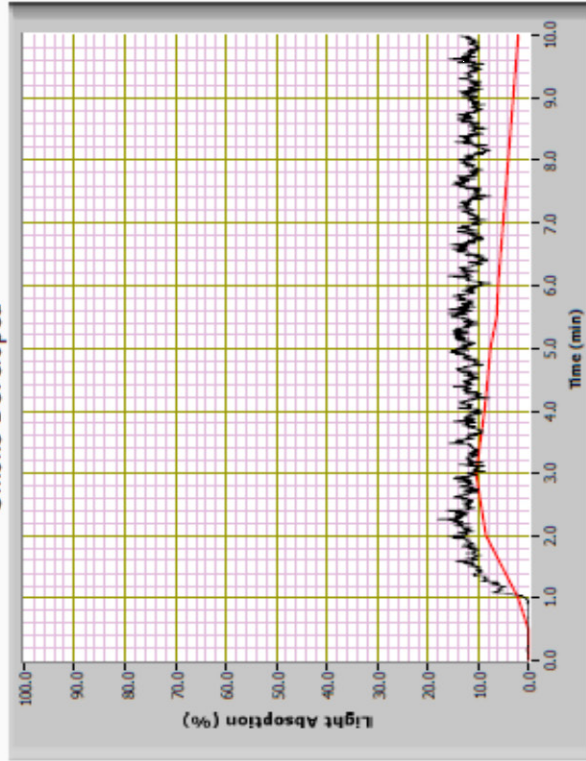
SAMPLE: CFP Thermowood-Ash
 MATERIAL: (4) 22" x 72" specimen decks
 SUPPORT: Self-Supporting
 REMARKS: Ignition Time: 0:33
 Max Flame Front: 10.88 FT. @ 9:47

Smoke Developed: 200.49
 Area under Smoke Curve (%A-min): 103.01

Flame Spread



Smoke Developed



The following data sheet is an actual printout of the computerized data system which monitors the tunnel furnace. The sheet contains all calibration and specimen data needed to calculate the test results.