NGC TESTING SERVICES
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Fire Testing Laboratory

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TEST REPORT

FOR

LAMIN-ART

1670 Basswood Road
Schaumburg, IL 60173

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

Test Report No: FH-2685-1

Assignment No: H-1223

Test Date: 09/01/2016

Report Date: 09/14/2016

Subject Material: Wood Veneer HPL -- Pat: L913-FR

Prepared by: _____

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Reviewed by: _____

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Director, Laboratory Facilities and Testing Services

TEST REPORT REVISION HISTORY:

DATE	SUMMARY
September 14, 2016	Original issue date. Original NGCTS report FH-2685-1.

INTRODUCTION:

This report presents the results of a specimen tested in accordance with the requirements of ASTM E84-16 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 directly to NGC Testing Services (NGCTS) by Lamin-Art, of Schaumberg, IL. The test specimen was identified by the client as:

Pat: L913-FR

The test specimen was received in good condition by NGCTS on August 26, 2016. The test specimen was submitted as three (3) nominally 0.040 in. thick by 2 ft. wide by 8 ft. long “strips” of a wood veneer HPL.

Upon receipt, the test specimen strips were placed in a conditioned environment (73.4 ± 5°F and 50 ± 5% relative humidity), where they remained until tested.

MOUNTING METHOD:

The (3) test specimen strips were placed end-to-end, directly on the tunnel ledges (with the strips’ veneer facing exposed to the burner flames), and butted tightly together to achieve the required specimen length. No additional support was required. Non-combustible, fiber-reinforced cement board (1/4 in. thick) was placed over the test specimen 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.

TEST NO.	MATERIAL TESTED	SIDE EXPOSED	SUPPORT	CALCULATED FLAME SPREAD	CALCULATED SMOKE DEVELOPED
1	Pat: L913 - FR	Veneer Face	Self-Supporting	32.99	50.00

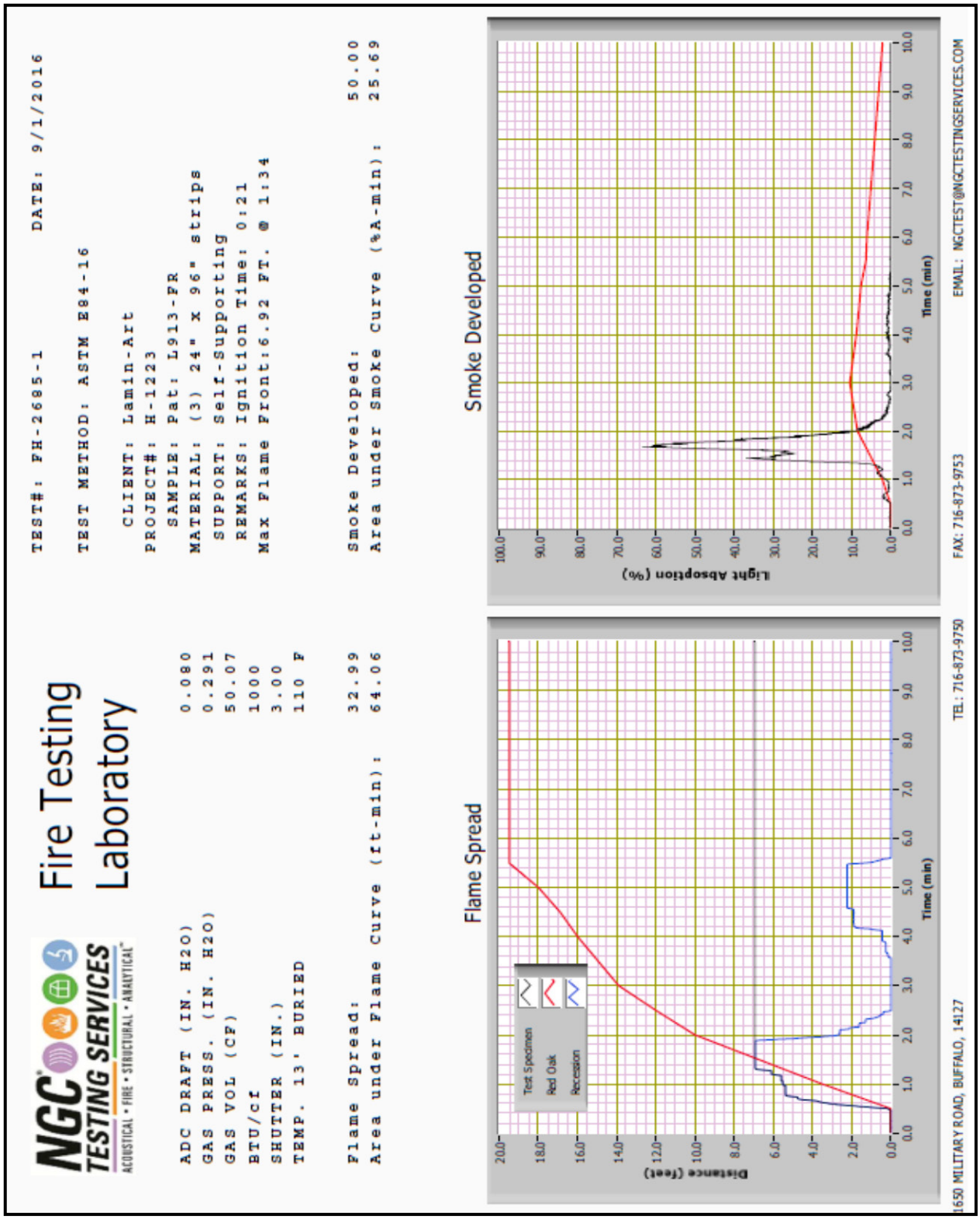
	MATERIAL TESTED	SIDE EXPOSED	SUPPORT	FLAME SPREAD INDEX *	SMOKE DEVELOPED INDEX*
	RED OAK FLOORING	FINISHED	SELF-SUPPORTING	100	100
	REINFORCED CEMENT BOARD	SYMMETRICAL	SELF-SUPPORTING	0	0
1	Pat: L913 - FR	Veneer Face	Self-Supporting	**35**	**50**

CLASSIFICATION	FSI	SDI
CLASS A or I	0 - 25	0 - 450
CLASS B or II	26 - 75	0 - 450
CLASS C or III	76 - 200	0 - 450

* 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.

Test Specimen	Flame Spread Index (FSI)	Smoke Developed Index (SDI)
Pat: L913-FR	**35**	**50**

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.



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TEST#: FH-2685-1 DATE: 9/1/2016

TEST METHOD: ASTM E84-16

CLIENT: Lamin-Art
PROJECT#: H-1223
SAMPLE: Pat: L913-PR
MATERIAL: (3) 24" x 96" strips
SUPPORT: Self-Supporting
REMARKS: Ignition Time: 0:21
Max Flame Front:6.92 FT. @ 1:34

ADC DRAFT (IN. H2O)	0.080
GAS PRESS. (IN. H2O)	0.291
GAS VOL (CF)	50.07
BTU/cf	1000
SHUTTER (IN.)	3.00
TEMP. 13' BURIED	110 F

Flame Spread:	32.99
Area under Flame Curve (ft-min):	64.06
Smoke Developed:	50.00
Area under Smoke Curve (%A-min):	25.69

Flame Spread

Distance (feet)

Time (min)

Test Specimen
Red Oak
Recession

Smoke Developed

Light Absorption (%)

Time (min)

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