

# 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-2720

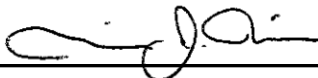
Assignment No: H-1283

Test Date: 02/10/2017

Report Date: 02/13/2017

Subject Material: Wood Veneer HPL – “913 FR (R1)”

Prepared by: \_\_\_\_\_



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Reviewed by: \_\_\_\_\_



Robert J. Menchetti  
Director, Laboratory Facilities and Testing Services

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**TEST REPORT REVISION HISTORY:**

DATE	SUMMARY
February 13, 2017	Original issue date. Original NGCTS report FH-2720.

**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 Schaumburg, IL. The test specimen was identified by the client as:

**913 FR (R1)**

The test specimen was received in good condition by NGCTS on February 2, 2017. The test specimen was submitted as three (3) nominally 0.045 in. thick by 2 ft. wide by 8 ft. long “strips” of a wood veneer high pressure laminate (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 to condition to a constant weight prior to testing.

**MOUNTING METHOD:**

The (3) test specimen strips were placed end-to-end, directly on the tunnel ledges (with the 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.

<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	913 FR (R1)	Veneer Face	Self-Supporting	26.64	31.03															
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<p>* 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.</p>																				

<b>Test Specimen</b>	<b>Flame Spread Index (FSI)</b>	<b>Smoke Developed Index (SDI)</b>
<b>913 FR (R1)</b>	<b>25</b>	<b>30</b>

ADC DRAFT (IN. H2O) 0.080  
 GAS PRESS. (IN. H2O) 0.286  
 GAS VOL (CF) 49.65  
 BTU/cf 1012  
 SHUTTER (IN.) 3.00  
 TEMP. 13' BURIED 105 F

Flame Spread: 26.64  
 Area under Flame Curve (ft-min): 51.72

TEST#: FH-2720 DATE: 2/10/2017

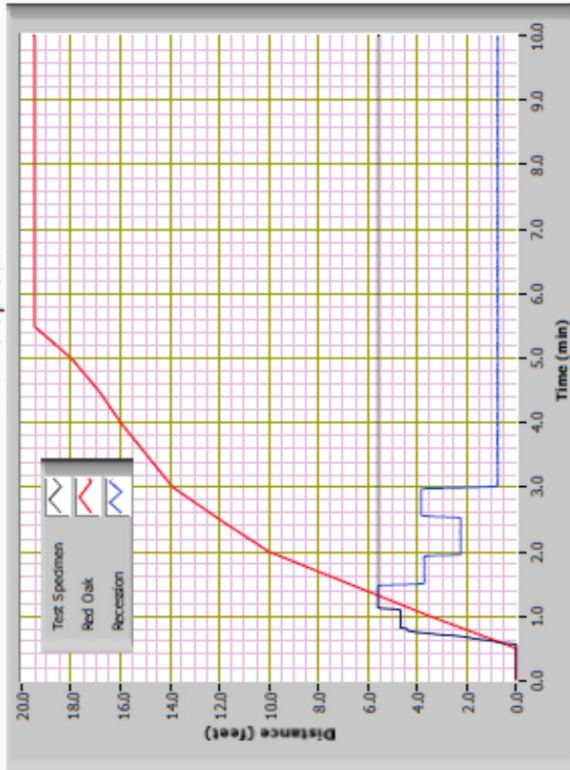
TEST METHOD: ASTM E-84-16

CLIENT: LAMIN-ART  
 PROJECT#: H-1283  
 SAMPLE: 913 FR (R1)  
 MATERIAL: LAMINATED PANELS 24" X 96" X  
 0.045"

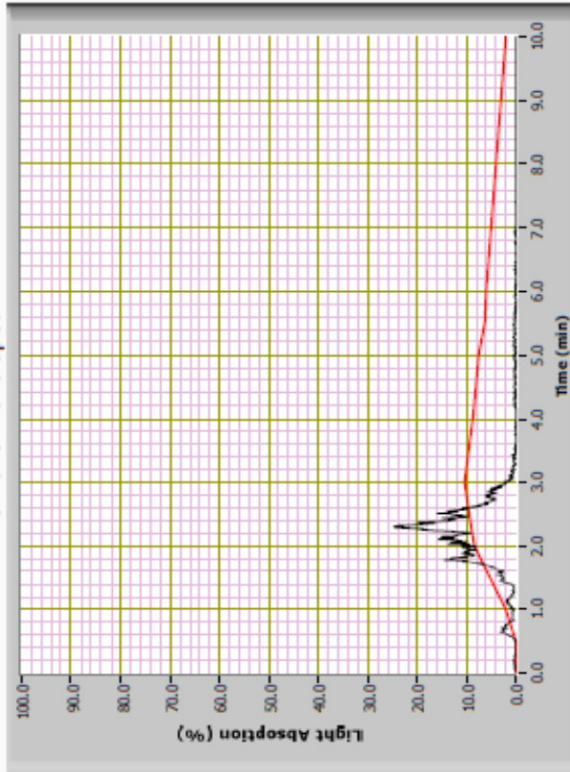
SUPPORT: SELF SUPPORTING  
 REMARKS: Ignition Time: 0:27  
 Max Flame Front: 5.59 FT. @ 1:28

Smoke Developed: 31.03  
 Area under Smoke Curve (%A-min): 15.95

**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.