

**CLIENT:** CRANE COMPOSITES  
Attn: Michelle Bauer  
8015 Dixon Drive  
Florence, KY 41042

<b>Test Report No: TJ1557-3</b>	<b>Date: October 3, 2013</b>
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**SAMPLE ID:** The Client submitted and identified the following test material as "LBCLN .090"

**SAMPLING DETAIL:** Test samples were submitted to the laboratory directly by the client. No special sampling conditions or sample preparation were observed by QAI.

**DATE OF RECEIPT:** Samples were received at QAI facilities on September 5, 2013

**TESTING PERIOD:** September 25, 2013

**AUTHORIZATION:** Proposal FB-2013-082701 approved on September 29, 2013

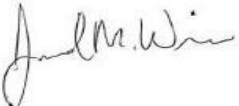
**TEST REQUESTED:** Perform standard flame spread and smoke density developed classification tests on the sample supplied by the Client in accordance with ASTM Designation E84-12, "Standard Method of Test for Surface Burning Characteristics of Building Materials". The foregoing test procedure is comparable to UL 723, ANSI/NFPA No. 255, and UBC No. 8-1.

<b>TEST RESULTS:</b>	<b><u>Flame Spread</u></b>	<b><u>Smoke Developed</u></b>
	130	200

**CLASSIFICATION:** The material tested resulted in a Class C. Detailed test results are presented in the subsequent pages of this report

**Prepared By**

**Signed for and on behalf of  
QAI Laboratories, Inc.**

  
Jared Weise  
Fire Test Technician

  
J. Brian McDonald  
Operations Manager



**PREPARATION AND CONDITIONING:** The sample was submitted in six 4 foot long panels measuring 21 inches wide and approximately 0.09 inches thick. The sample material was placed into conditioning at 73°F (±5°F) and 50% (±5%) relative humidity until day of testing.

**E 84 TEST DATA SHEET:**

**MOUNTING METHOD:** The sample was self-supporting and placed along the ledges of the tunnel during testing. No additional mounting method was used

**CLIENT:** Crane Composites **DATE:** September 25, 2013

**SAMPLE:** LBCLN .090

**IGNITION:** 0 minutes, 48 seconds

**FLAME FRONT:** 18 feet maximum

**TIME TO MAXIMUM SPREAD:** 2 minutes, 00 seconds

**TEST DURATION:** 10 minutes, 00 seconds

**SUMMARY: FLAME SPREAD:** 130 (127.8 unrounded)      **SMOKE DEVELOPED:** 200 (212 unrounded)

**OBSERVATIONS:**

The test material began to bubble at 40 seconds. Crackling was heard at 39 seconds, light charring seen at 50 seconds followed by sustained ignition at 48 seconds. Moderate smoke generation noted. No after flame noted at test conclusion.

**CALIBRATION DATA:**

Time to Ignition of Last Red Oak (sec):	57
Red Oak Smoke Area (%A*Min):	111
Total Fuel Burned (ft <sup>3</sup> )	59.68



**SUMMARY OF ASTM E84 RESULTS:**

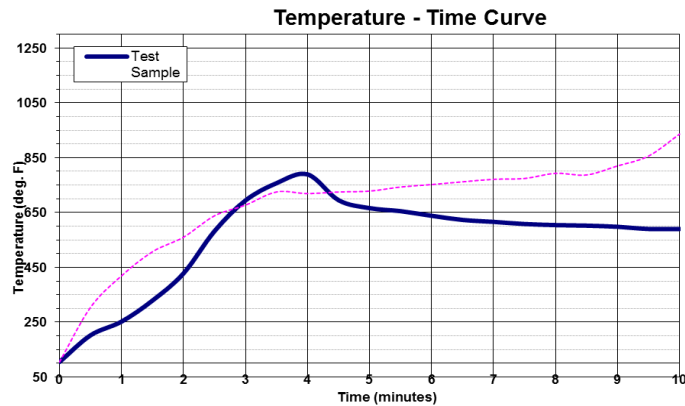
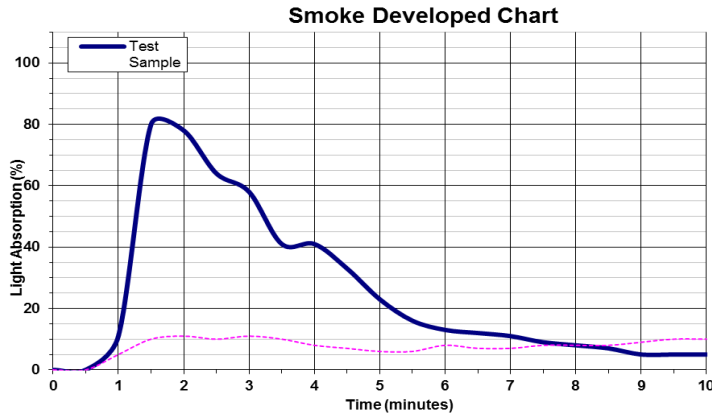
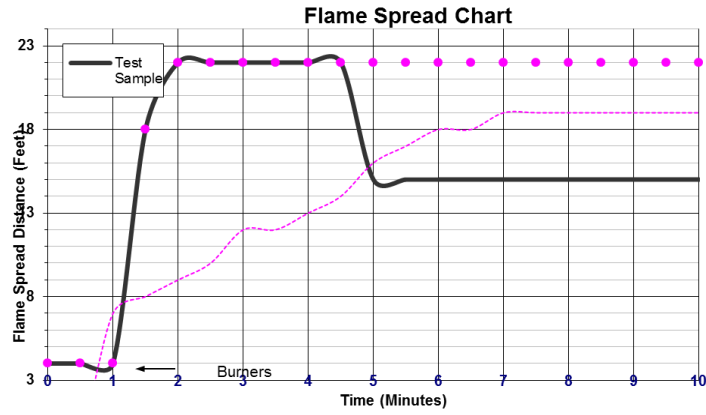
Because of the possible variations in reproducibility, the results are adjusted to the nearest figure divisible by 5. Smoke Density values over 200 are rounded to the nearest figure divisible by 50.

In order to obtain the Flame Spread Classification, the above results should be compared to the following table:

<u>NFPA CLASS</u>	<u>IBC CLASS</u>	<u>FLAME SPREAD</u>	<u>SMOKE DEVELOPED</u>
A	A	0 through 25	Less than or equal to 450
B	B	26 through 75	Less than or equal to 450
C	C	76 through 200	Less than or equal to 450

**BUILDING CODES CITED:**

1. National Fire Protection Association, ANSI/NFPA No. 101, "Life Safety Code", 2006 Edition.
2. International Building Code, 2006 Edition, Chapter 8, Interior Finishes, Section 803.



**END OF REPORT**

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