

CLIENT: CRANE COMPOSITES
Attn: Mike Buhr
23525 W. Eames Street
Channahon, IL 60410

Test Report No: TJ1005-1	Date: December 26, 2012
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SAMPLE ID: The Client submitted and identified the following test material as “**Kemply-6mm ACP Core, Single Sided FSI wall and ceiling panel**”

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 December 10, 2012

TESTING PERIOD: December 21, 2012

AUTHORIZATION: Proposal FB112612-1 signed by Tim Ngo on November 27, 2012

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.

TEST RESULTS:	<u>Flame Spread</u>	<u>Smoke Developed</u>
	15	185

Detailed test results are presented in the subsequent pages of this report

Prepared By

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



Gregory Ertel
Fire Test Technician



J. Brian McDonald
Operations Manager



PREPARATION AND CONDITIONING: The sample was submitted in four 6 foot long panels cut to measure 21 inches wide and approximately 0.325 total 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 placed on the ledges of the tunnel and tested as a self-supporting specimen using no mounting method.

CLIENT: Crane Composites **DATE:** December 21, 2012

SAMPLE: Kemply 6mm

IGNITION: 0 minutes, 52 seconds

FLAME FRONT: 11 feet maximum

TIME TO MAXIMUM SPREAD: 9 minutes, 00 seconds

TEST DURATION: 10 minutes, 00 seconds

SUMMARY: FLAME SPREAD: 15 (17 unrounded) **SMOKE DEVELOPED:** 185 (183 unrounded)

OBSERVATIONS:

Steady ignition occurred at 52 seconds after ignition. Sample started to blister and bubble prior to ignition at 35 seconds. Sample then began to continue to blister and char at 2 minutes and 30 seconds after ignition. Flames were not noted immediately after test cessation.

CALIBRATION DATA:

Time to Ignition of Last Red Oak (sec):	45
Red Oak Smoke Area (%A*Min):	112
Maximum Temperature (°F):	611
Time to Maximum Temperature (min:sec):	10:00
Total Fuel Burned (ft³)	54.61



SUMMARY OF ASTM E84 RESULTS:

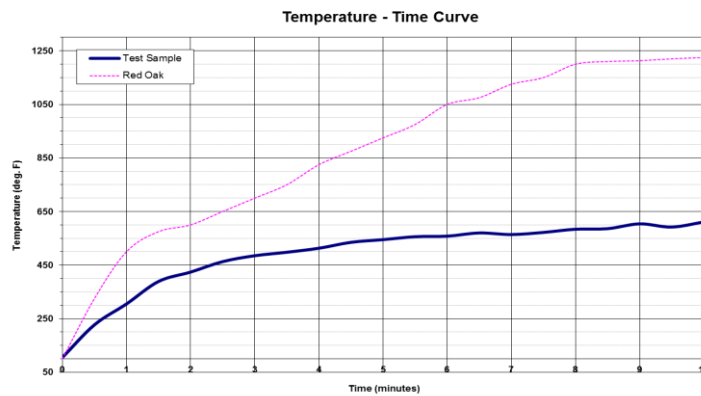
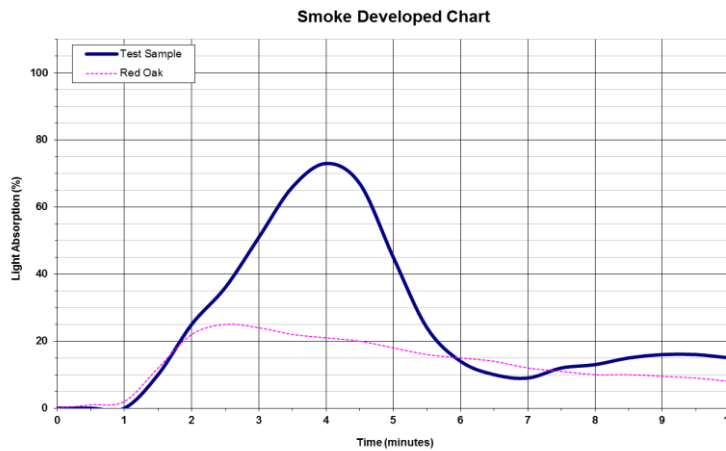
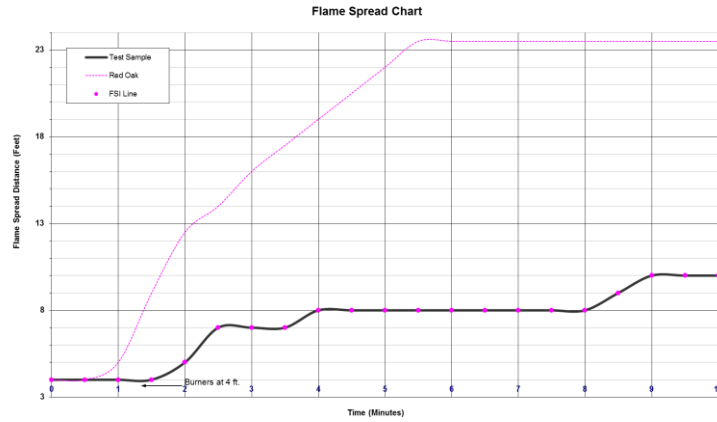
Because of the possible variations in reproducibility, the results are adjusted to the nearest figure divisible by 5. Smoke Density values over 200 are rounded to the nearest figure divisible by 50.

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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