

CLIENT: CRANE COMPOSITES
23525 W. Eames St.
Channahon, IL 60410

Test Report No: TJ2863	Date: April 15, 2015
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SAMPLE ID: The client identified the following test material as “GLASBORD REI .12”

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 April 10, 2015

TESTING PERIOD: April 15, 2015

AUTHORIZATION: Signed work order VB-2015-032001

TEST REQUESTED: Perform standard flame spread and smoke density developed classification tests on the sample supplied by the Client in accordance with ASTM Designation E84-15, "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>
	70	250

CLASSIFICATION: The material resulted in a class “B”. Detailed test results are presented in the subsequent pages of this report

Prepared By



Jeff Foster
Fire Test Technician

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



J. Brian McDonald
Operations Manager

PREPARATION AND CONDITIONING: The sample was submitted in six panels 4 feet long measuring 24 inches wide and approximately 2.74 mm thick. The sample material was placed into conditioning at 73°F ($\pm 5^\circ\text{F}$) and 50% ($\pm 5\%$) relative humidity until day of testing.

E 84 TEST DATA SHEET:

MOUNTING METHOD: The sample was supported during testing by 2" hexagonal mesh poultry netting running the length of the test chamber and 1/4" round metal rods placed at 2' intervals across the width of the test chamber, with cement board place between the sample and tunnel lid.

CLIENT: Crane Composites **DATE:** April 15, 2015

SAMPLE: Glasbord REI .12

IGNITION: 1 minute, 26 seconds

FLAME FRONT: 19 feet maximum

TIME TO MAXIMUM SPREAD: 5 minutes, 30 seconds

TEST DURATION: 10 minutes, 00 seconds

SUMMARY: FLAME SPREAD: 70 (71.4 unrounded) **SMOKE DEVELOPED:** 250 (255 unrounded)

OBSERVATIONS:

Cracking was heard at 1 minute and bubbling 1 minute 6 seconds. Sustained ignition was at 1 minute 26 seconds. At 2 minutes the flame spread quickly to towards the end of the tunnel. At 5 minutes 30 seconds the end of tunnel had been reached, and at 6 minutes and 30 seconds the test was aborted due to high temperature. There was after burn at the conclusion of the test, which was suppressed by fire technician.

CALIBRATION DATA:

Time to Ignition of Last Red Oak (sec):	54
Red Oak Smoke Area (%A* Min):	109.7
Total Fuel Burned (ft ³)	50.21

SUMMARY OF ASTM E84 RESULTS:

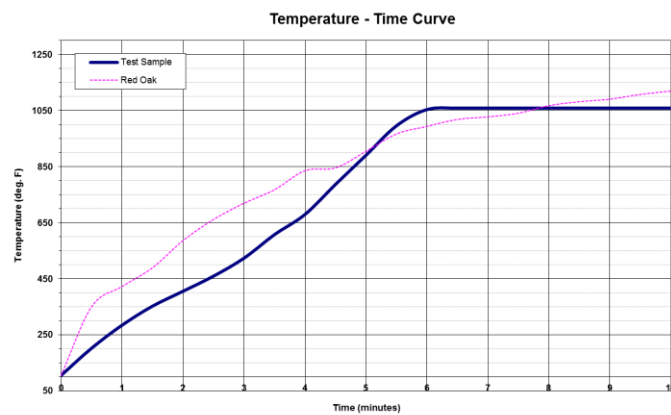
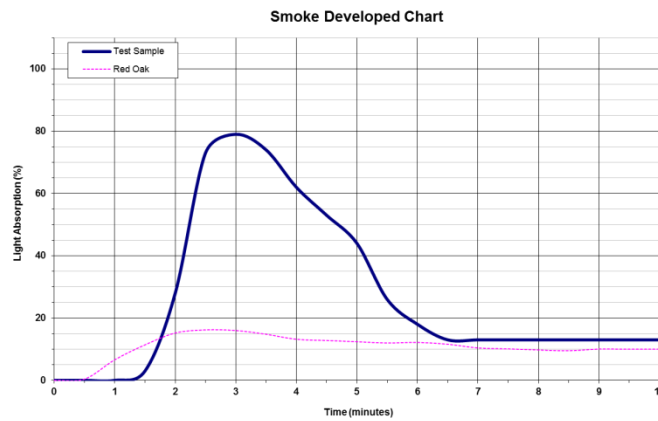
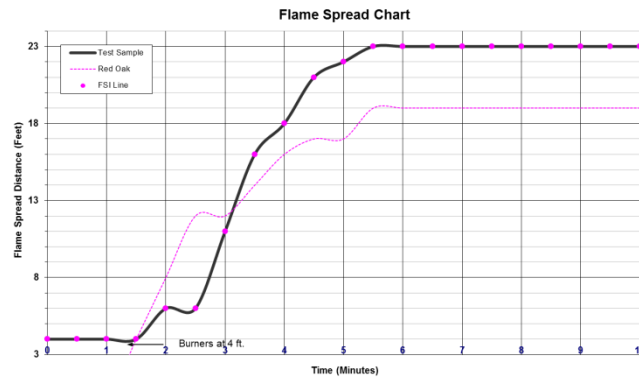
Because of the possible variations in reproducibility, the results are adjusted to the nearest figure divisible by 5. Smoke Density values over 200 are rounded to the nearest figure divisible by 50.

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 TEST REPORT*****

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