



CLIENT: CRANE COMPOSITES

8015 Dixon Drive Florence, KY 41042

Test Report No: TJ4967-R1 Date: August 21, 2017

SAMPLE ID: The client identified the following test material as "FTSTF 0.090"

SAMPLING DETAIL: Test samples were submitted to the laboratory directly by the client. No special

sampling conditions or sample preparation was observed by QAI.

DATE OF RECEIPT: Samples were received at QAI facilities on August 14, 2017

TESTING PERIOD: August 15, 2017

AUTHORIZATION: Signed work order 17VB073102

TEST REQUESTED: Perform standard flame spread and smoke density developed classification tests on the

sample supplied by the Client in accordance with CAN/ULC S102-10, "Method of Test for

Surface Burning Characteristics of Building Materials and Assemblies".

TEST RESULTS: Flame Spread Rating Smoke Developed Classification

65* 110*

* Note: The "Test Results" are the results of a single test not the average of triplicate

testing as required the standard.

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

Prepared By

Daniel Barnett Project Engineer Signed for and on behalf of QAI Laboratories, Inc.

J. Brian McDonald
Operations Manager



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PREPARATION AND CONDITIONING: The sample was submitted in four 6 foot long pieces of material measuring 24 inches wide and 0.080 inches thick. The sample material was placed into conditioning at 73° F ($\pm 5^{\circ}$ F) and 50% ($\pm 5^{\circ}$) relative humidity until day of testing.

MOUNTING METHOD: The sample was supported using two inch hexagonal mesh poultry netting running the length of the test chamber and ½" round metal rods were placed at 2' intervals across the width of the test chamber. The samples were butted end to end in the test chamber, with cement board place between the lid and sample.

CALIBRATION DATA:

Time to Ignition of Last Red Oak (sec): 39
Red Oak Smoke Area (%A*Min): 111.0
Total Fuel Burned (ft³) 61.0

TEST RESULTS:		Flame Spread Values	Smoke Developed Values
	Test No. 1	64.4	111.0
	Test No. 2	0.0	0.0
	Test No. 3	0.0	0.0
	Average	64.4	111.0

Rounded Average Flame Spread Rating (FSR): 65

Rounded Average Smoke Developed Classification (SDC): <u>110</u>



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CAN/ULC S102-10 TEST DATA SHEET: (Test 1)

CLIENT: Crane Composites DATE: August 15, 2017

SAMPLE: FTSTF 0.090

IGNITION: <u>0 minutes, 42 seconds</u>

FLAME FRONT: 14 foot maximum

TIME TO MAXIMUM SPREAD: 2 minutes, 30 seconds

TEST DURATION: 10 minutes, 00 seconds

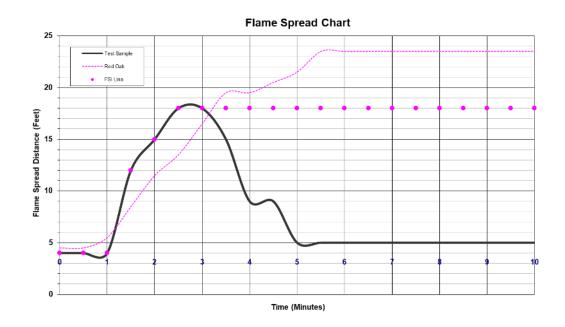
SUMMARY: FLAME SPREAD: 65 (64.4 unrounded) SMOKE DEVELOPED: 110 (111 unrounded)

OBSERVATIONS:

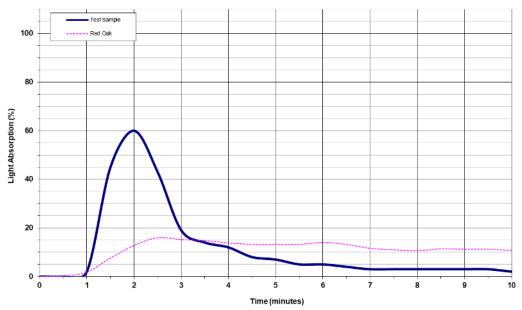
The surface of the material began displaying signs of charring 21 seconds from the start of the test followed by the sample sustaining ignition at 42 seconds. At 52 seconds, the technician noted the material flaking. No other major changes occurred for the remainder of the test. Afterglow was present after the conclusion of the test.



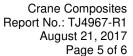
Graphical Data



Smoke Developed Chart

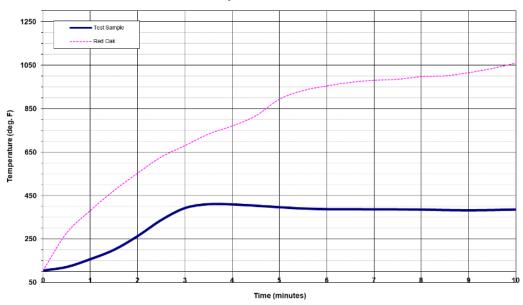


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Temperature - Time Curve



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Post Test Images



Revision History

Revision Date: August 21, 2017

The material was tested to the standard CAN/ULC S102 but mistakenly written as an ASTM E84 test report. This report was revised to meet the requirements found in CAN/ULC S102.

This report TJ4967-R1 supersedes and replaces any previous reports under the name TJ4967.

END OF TEST REPORT

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