

CLIENT: **MARLITE**
1 Marlite Drive
Dover, OH 44622

Test Report No: TJ3507	Date: February 16, 2016
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SAMPLE ID: The client identified the following test material as “**CERAMIC STEEL**”

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 February 4, 2016

TESTING PERIOD: February 12, 2016


AUTHORIZATION: Signed work order FB-2015-110202

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>
	0	75

CLASSIFICATION: The material resulted in a class “A”. 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 three panels 8 feet long measuring 24 inches wide and approximately 1/4" 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 the white side was exposed to the burner flames. The samples were butted end to end in the test chamber, with cement board place between the lid and sample.

CLIENT: Marlite **DATE:** February 16, 2016

SAMPLE: Ceramic Steel

IGNITION: 0 minutes, 0 seconds

FLAME FRONT: 0 feet maximum

TIME TO MAXIMUM SPREAD: 0 minutes, 00 seconds

TEST DURATION: 10 minutes, 00 seconds

SUMMARY: FLAME SPREAD: 0 (0.0 unrounded) **SMOKE DEVELOPED:** 75 (76 unrounded)

OBSERVATIONS:

Bubbling and blistering were both seen at 15 seconds. Warping could be seen a short time later at 1 minute 24 seconds. There was no sample ignition or flame spread. Duration of the ten minute test was uneventful. No afterglow was seen at the conclusion of the test.

CALIBRATION DATA:

Time to Ignition of Last Red Oak (sec):	50
Red Oak Smoke Area (%A*Min):	130.8
Total Fuel Burned (ft ³)	60.49

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.

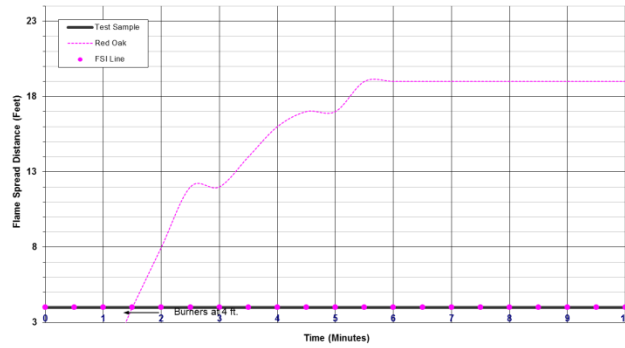
In order to obtain the Flame Spread Classification, the above results should be compared to the following table:

<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

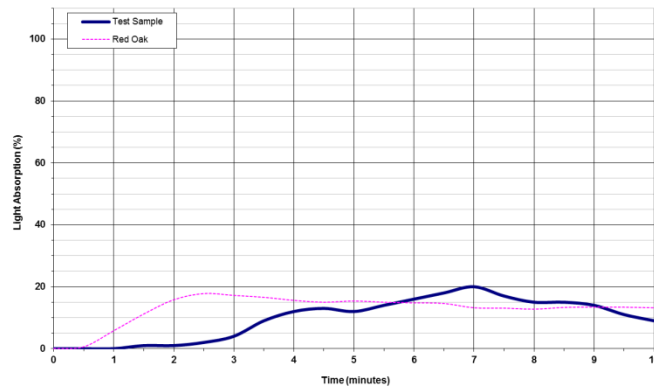
BUILDING CODES CITED:

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.

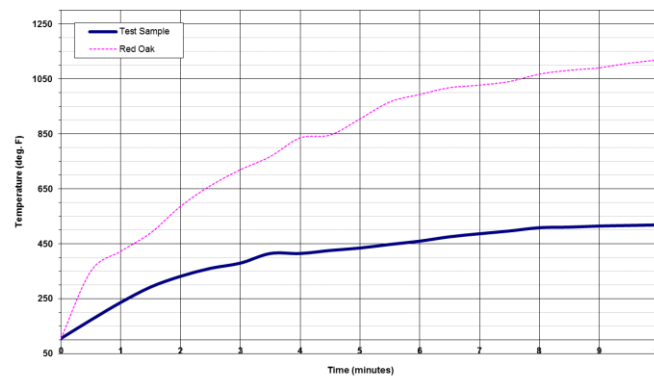
Flame Spread Chart



Smoke Developed Chart



Temperature - Time Curve



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PHOTOS: AFTER TEST IMAGES



*****END OF TEST REPORT*****

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