

CLIENT:

Lightblocks, Inc.
164 Burke Street
Nashua, NH 03060

Test Report No: TJ0707-1

Date: July 30, 2012

SAMPLE ID: The Client submitted and identified the following test material as 1/16" (1/5mm) Polycarbonate, custom color, fire retardant backer; front surface, matte finish with resin coat

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 on July 16, 2012

TESTING PERIOD: July 25, 2012

AUTHORIZATION: Signed Work Order by Michael Samborn of Lightblocks, Inc.

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: **Flame Spread**

20

Smoke Developed

350

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

Prepared By



Gregory Ertel
Fire Test Technician

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



J. Brian McDonald
Operations Manager



PREPARATION AND CONDITIONING: The sample material was submitted in sufficient quantity to form a specimen 21" wide by 24' long. 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 two foot intervals across the width of the test chamber.

E 84 TEST DATA SHEET:

CLIENT: Lightblocks, Inc. **DATE:** July 25, 2012

SAMPLE: 1/16" (1/5mm) Polycarbonate, custom color, fire retardant backer; front surface, matte finish with resin coat

FLAME SPREAD:

IGNITION: 0 minutes, 35 seconds

FLAME FRONT: 5 feet maximum

TIME TO MAXIMUM SPREAD: 2 minutes, 00 seconds

TEST DURATION: 10 minutes, 00 seconds

SUMMARY: FLAME SPREAD: 20 **SMOKE DEVELOPED:** 350(365)

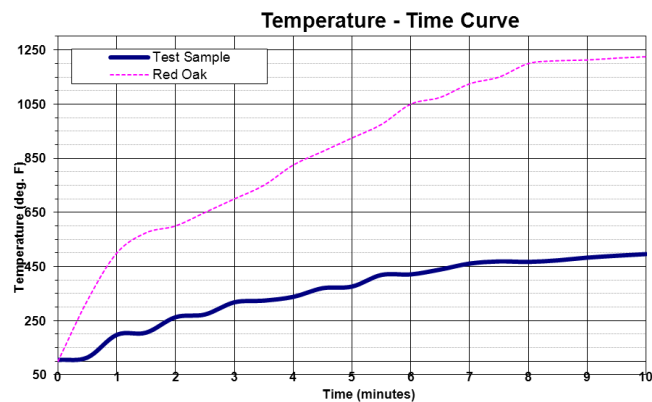
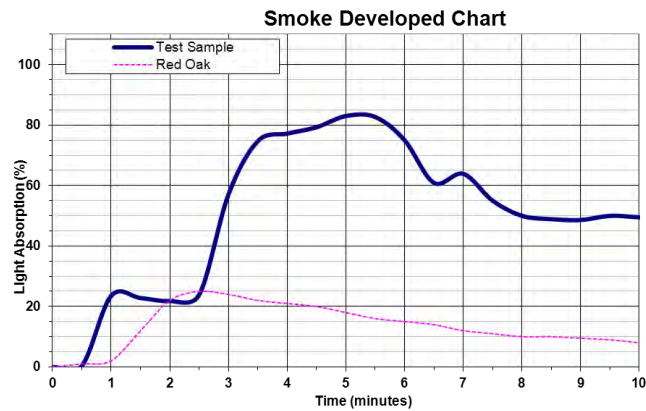
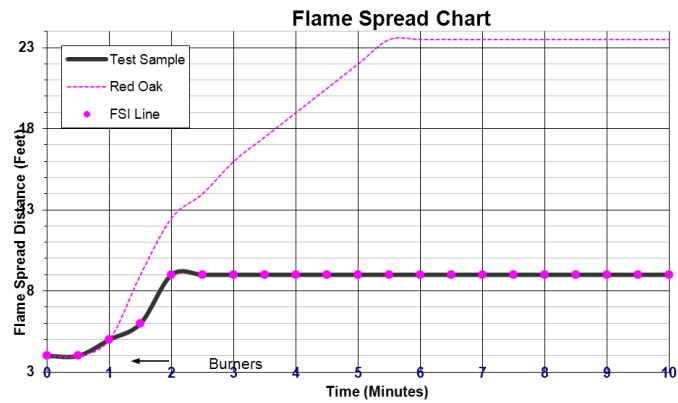
SUMMARY OF ASTM E84 RESULTS: Because of the possible variations in reproducibility, the results are adjusted to the nearest figure divisible by 5. Smoke Density values over 200 are rounded to the nearest figure divisible by 50.

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.



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