

**CLIENT:** POLYGEM, INC  
Attn: Jay Schmid  
PO Box 609  
West Chicago, IL 60186

<b>Test Report No: TJ1263</b>	<b>Date: May 9, 2013</b>
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**SAMPLE ID:** The Client submitted and identified the following test material as “#307 FR-LITE”.

**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 24, 2013

**TESTING PERIOD:** May 2, 2013

**AUTHORIZATION:** Proposal PA010413-1 approved on April 23, 2013

**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.

<b>TEST RESULTS:</b>	<b><u>Flame Spread</u></b>	<b><u>Smoke Developed</u></b>
	10	245

**CLASSIFICATION:** The material tested resulted in a Class A. Detailed test results are presented in the subsequent pages of this report

**Prepared By**



Jared Weise  
Fire Test Technician

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



J. Brian McDonald  
Operations Manager



**PREPARATION AND CONDITIONING:** The sample was submitted and tested in six 4 foot long samples cut to measure 24 inches wide and approximately 0.25 inches of total thickness. The material was adhered to concrete board and 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 self-supporting and the foam side was exposed to the burner flames. The samples were butted end to end in the test chamber.

**CLIENT:** Polygem Inc **DATE:** May 9, 2013

**SAMPLE:** #307 FR-LITE

**IGNITION:** 2 minutes, 03 seconds

**FLAME FRONT:** 5 feet maximum

**TIME TO MAXIMUM SPREAD:** 9 minutes, 00 seconds

**TEST DURATION:** 10 minutes, 00 seconds

**SUMMARY: FLAME SPREAD:** 10 (10.9 unrounded)      **SMOKE DEVELOPED:** 245 (247 unrounded)

**OBSERVATIONS:**

Sustained ignition of sample began at 2 minutes and 3 seconds after test was initiated. Minimal flame spread was noted with a fair amount of smoke. There was some after burn noted at test conclusion.

**CALIBRATION DATA:**

Time to Ignition of Last Red Oak (sec):	57
Red Oak Smoke Area (%A*Min):	111
Maximum Temperature (°F):	566
Time to Maximum Temperature (min:sec):	10:00
Total Fuel Burned (ft <sup>3</sup> )	57.99



**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.

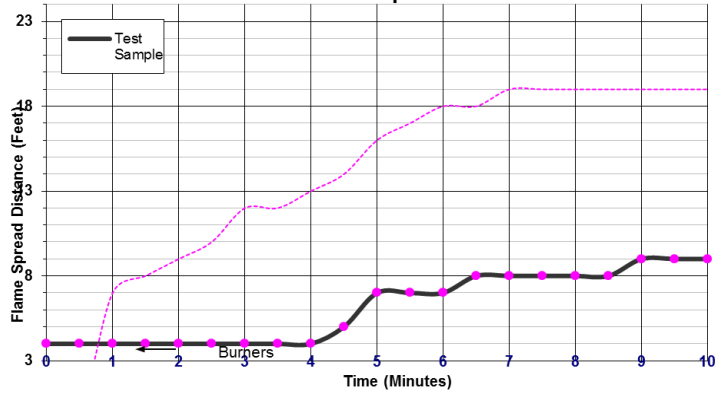
In order to obtain the Flame Spread Classification, the above results should be compared to the following table:

<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

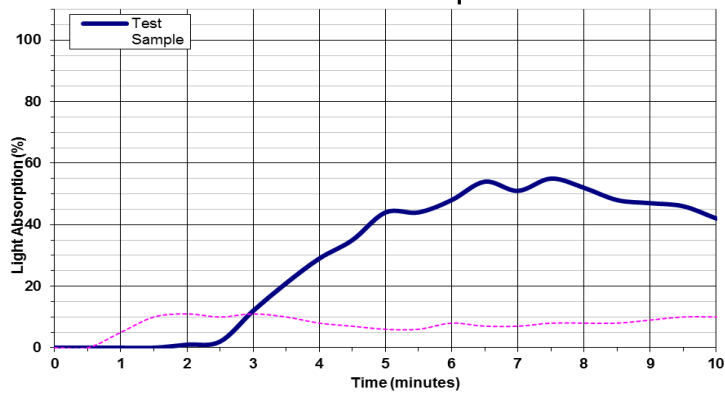
**BUILDING CODES CITED:**

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.

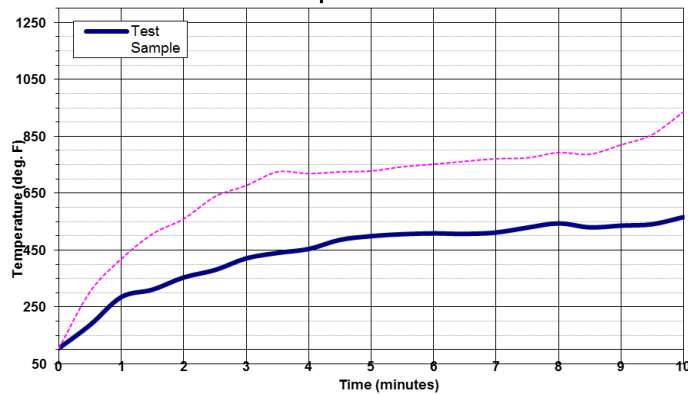
**Flame Spread Chart**



**Smoke Developed Chart**



**Temperature - Time Curve**



**END OF REPORT**

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