

**CLIENT:**

Polygal Inc.  
PO Box 410592  
Charlotte, NC 28241

<b>Test Report No: TJ0498-1</b>	<b>Date: April 11, 2012</b>
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**SAMPLE ID:** The Client submitted and identified the following test material as Titan Sky.

**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 March 28, 2012

**TESTING PERIOD:** April 3, 2012

**AUTHORIZATION:** Signed Work Order by Mark Dailey of Polygal 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 E84-11, "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>	<u><b>Flame Spread</b></u>	<u><b>Smoke Developed</b></u>
	5	70

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

**Prepared By**

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

  
Gregory Ertel  
Fire Test Technician

  
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.

**E 84 TEST DATA SHEET:**

**CLIENT:** Polygal Inc. **DATE:** April 3, 2012

**SAMPLE:** Titan Sky

**FLAME SPREAD:**

**IGNITION:** 0 minutes, 40 seconds

**FLAME FRONT:** 1 feet maximum

**TIME TO MAXIMUM SPREAD:** 1 minutes, 30 seconds

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

**SUMMARY: FLAME SPREAD: 5 SMOKE DEVELOPED: 70 (70)**

**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.

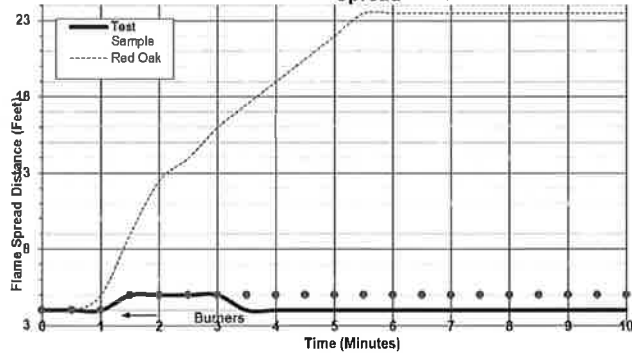
In order to obtain the Flame Spread Classification, the above results should be compared to the following table:

<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

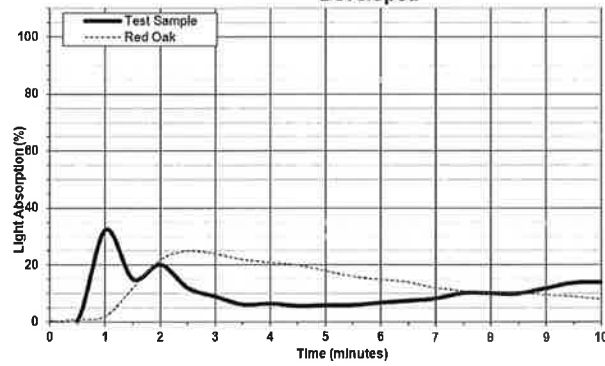
**BUILDING CODES CITED:**

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.

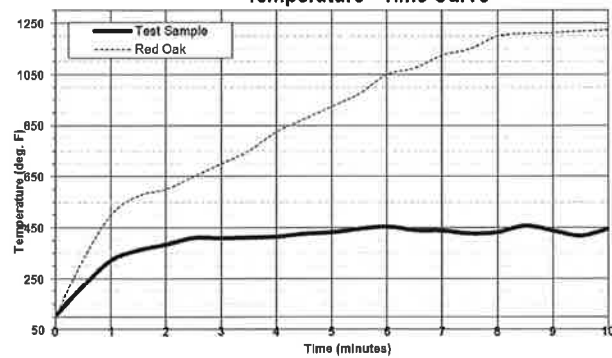
**Flame Spread Chart**



**Smoke Developed Chart**



**Temperature - Time Curve**



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