



TEST REPORT

CLIENT: Polygal Inc.  
PO Box 410592  
Charlotte, NC 28241  
Attn: Nick Koszegi

Test Report No: 2119202-15R Date: October 18, 2010

SUBJECT: Testing to ASTM E-84

SAMPLE ID: Sample identified as "16mm RFX Clear" was received from the client on 8/2/10 in good condition. The sample was described by the manufacturer of containing the following items:

- Sample Description: 16mm RFX

TEST REQUESTED: Perform standard flame spread and smoke density developed classification tests on the sample supplied by the Client in accordance with ASTM Designation E84-09a, "Standard Method of Test for Surface Burning Characteristics of Building Materials". The test procedure is equivalent to UL 723, ANSI/NFPA No. 255, and UBC No. 8-1.

REPARATION: The sample material was submitted and cut by the technician into three pieces, 21" wide by 8' long.

TEST DATE: 8/13/10

RESULTS: Results can be found on the following pages and apply only to the sample tested.

CLASSIFICATION: The sample received a Class A rating in accordance with the NFPA and IBC classification chart on page two of this report.

REVISION: Sample Description changed from "16mm RFX Clear" to "16mm RFX".

SIGNED FOR AND ON BEHALF OF  
SGS U.S. TESTING COMPANY INC.

KSM

Greg Ertel  
Engineering Technician

J. Brian McDonald  
Fire Technology Department Manager

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**RESULTS:**

**SAMPLE:** 16mm RFX

**TEST DATE:** 8/13/10

**DATA:**

<b><u>Ignition (minutes: seconds)</u></b>	0:30
<b><u>Flame Front (feet)</u></b>	4.0
<b><u>Time to Maximum Spread (minutes: seconds)</u></b>	10:00
<b><u>Flame Spread</u></b>	5
<b><u>Smoke Developed</u></b>	350

<b><u>NFPA Class</u></b>	<b><u>IBC Class</u></b>	<b><u>Flame Spread</u></b>	<b><u>Smoke Developed</u></b>
A	A	0 through 25	≤ 450
B	B	26 through 75	≤ 450
C	C	76 through 200	≤ 450

Total Test Time, (hr:min:sec): 0:10:00

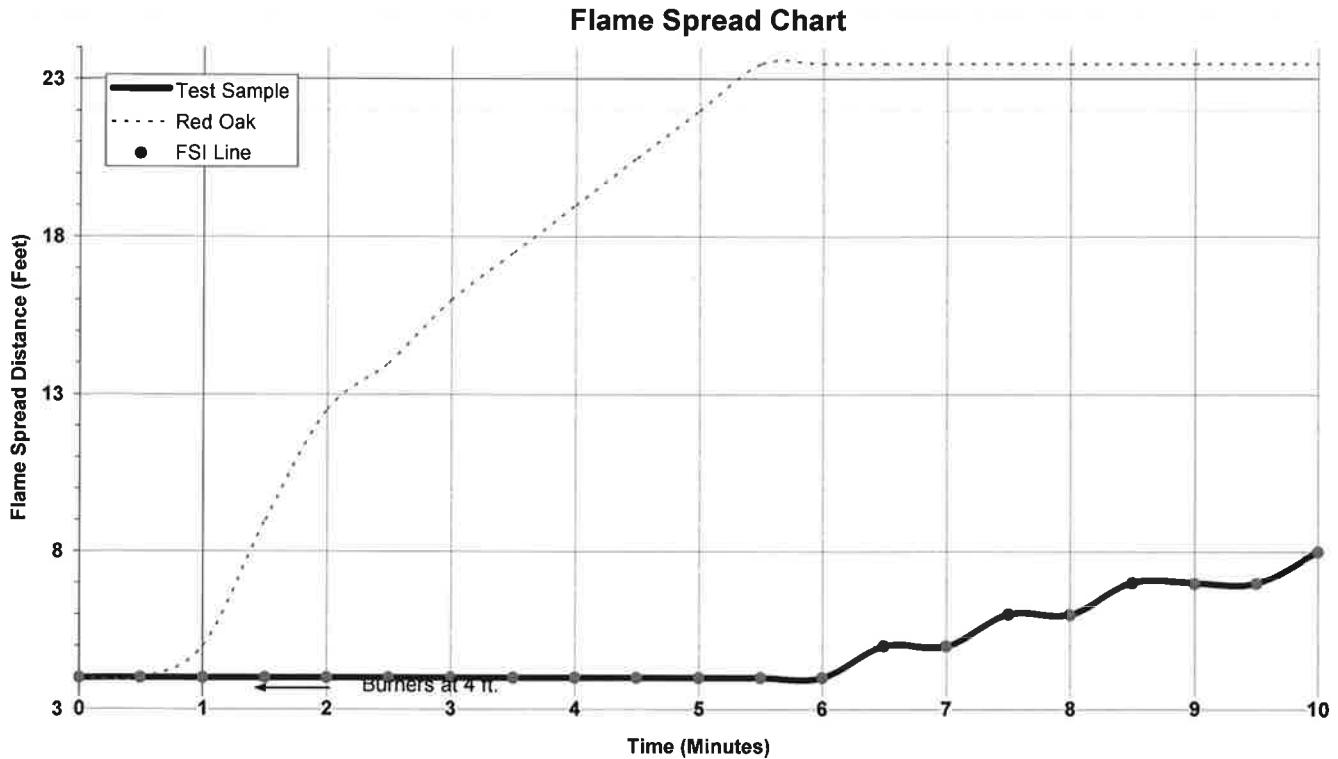
**Building Codes Cited:**

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

**Observations:**

- Sagging
- Dripping
- Shrinking
- Warping
- Flame Dripping
- Melting

**GRAPHICAL RESULTS:**



**FIGURE 1. Flame Spread**

GRAPHICAL RESULTS: (Cont.)

Smoke Developed Chart

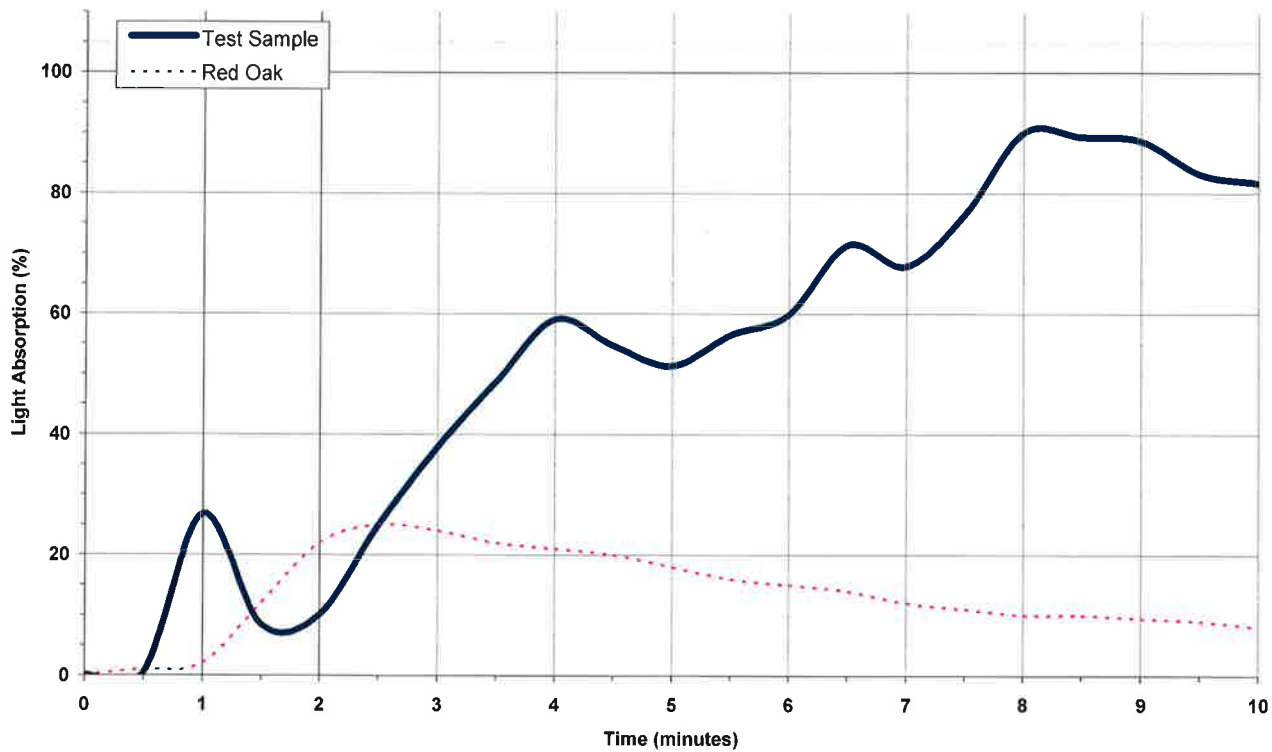


FIGURE 2. Smoke Developed

GRAPHICAL RESULTS: (Cont.)

Temperature - Time Curve

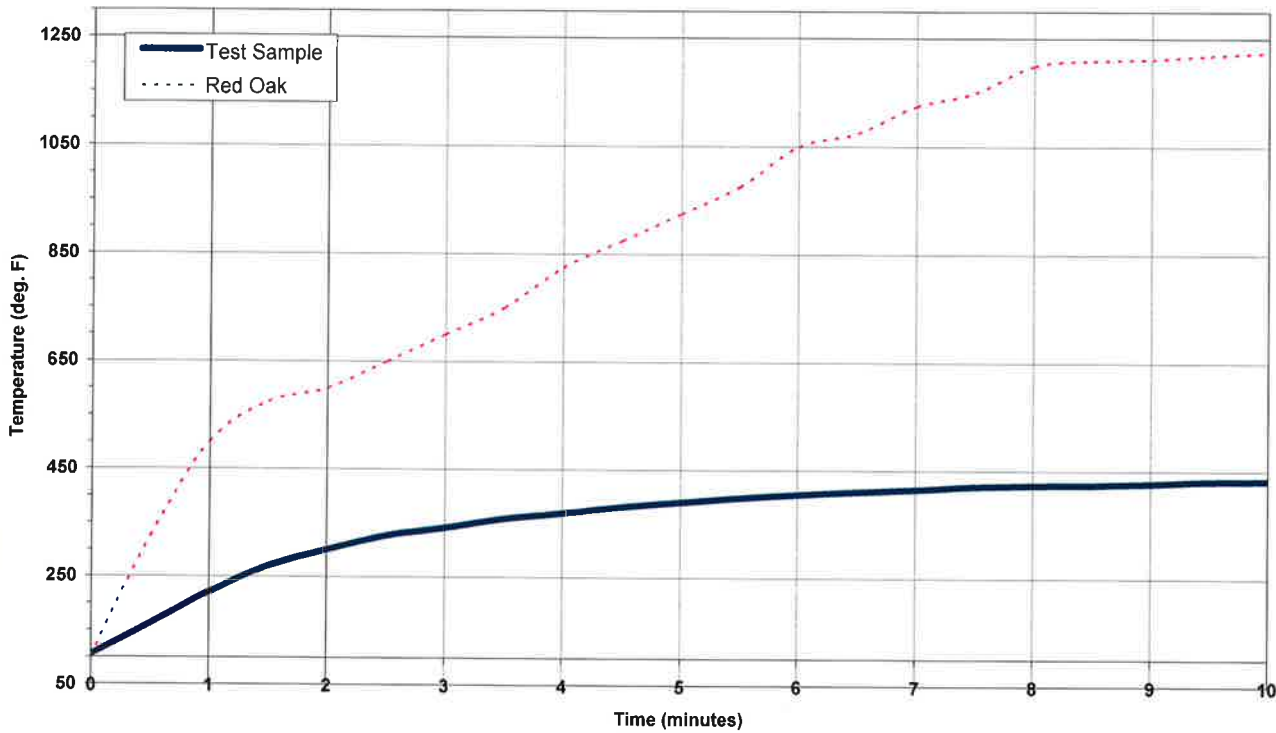


FIGURE 3. Temperature – 24 ft. Air Stream Thermocouple

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End of Report