



CLIENT: POLYGAL, INC.
P.O. Box 410592
Charlotte, NC 28241
Ward Ogle

Test Report No: 840349-3	Date: January 24, 2007
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SAMPLE ID: The Client submitted and identified the following test material as Polygal 35mm Polycarbonate panels.

DATE OF RECEIPT: Entered into SGS USTC sample tracking system on December 7, 2006.

TESTING PERIOD: December 27, 2006.

AUTHORIZATION: Testing authorized by Ward Ogle.

TEST REQUESTED: Perform standard flame spread and smoke density developed classification tests on the sample supplied by the Client in accordance with ASTM Designation E84-03, "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 Density</u>
	35	150*
	For detailed results see page 3.	
	*See note on page 3.	

Tested by


Brian Ortega
Test Technician

**Signed for and on behalf of
SGS U.S. Testing Company Inc.**


Greg Banasky
Supervisor Fire Technology

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PREPARATION AND CONDITIONING: The sample material was submitted in three pieces, 22" wide by 96" long, conforming to test chamber dimensions. 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.

Prior to testing, the specimen was placed in the conditioning room (maintained at $73.4 \pm 5^\circ$ F and a relative humidity of $50 \pm 5\%$) and allowed to reach moisture equilibrium.

CEMENT BOARD PLACEMENT: The cement boards were placed between the specimen and the furnace lid assembly.

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

<u>SAMPLE IDENTIFICATION</u>	<u>FLAME SPREAD</u>	<u>SMOKE DENSITY</u>
Polygal 35mm Polycarbonate panels	35	150*

*See note on page 3.

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

<u>NFPA CLASS</u>	<u>UBC CLASS</u>	<u>FLAME SPREAD</u>
A	I	0 through 25
B	II	26 through 75
C	III	76 through 200

BUILDING CODES CITED:

1. National Fire Protection Association, ANSI/NFPA No. 101, "Life Safety Code", 1994 Edition.
2. Uniform Building Code, 1994 Edition, Chapter 8, Interior Finishes, Sections 801-807.



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E 84 TEST DATA SHEET:

CLIENT: Polygal, Inc. DATE: 12/27/06

SAMPLE: Polygal 35mm Polycarbonate panels

FLAME SPREAD:

IGNITION: 1 minute, 12 seconds

FLAME FRONT: 19.5 feet maximum

TIME TO MAXIMUM SPREAD: 6 minutes

TEST DURATION: 6 minutes, 15 seconds

CALCULATION: $69.43 \times 0.515 = 35.75$

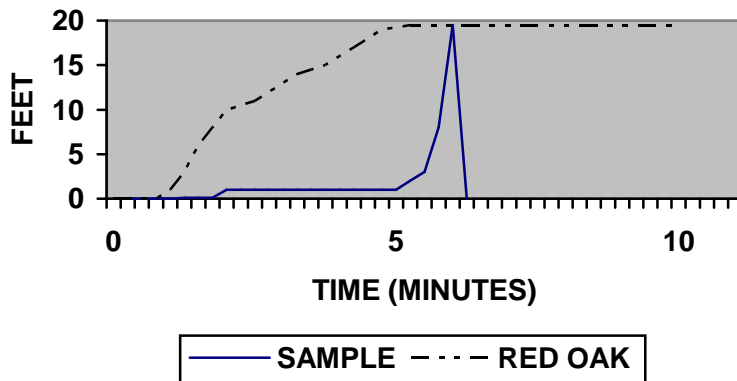
SUMMARY: FLAME SPREAD: 35 SMOKE DENSITY: 150*

OBSERVATIONS: Sample surface ignition was observed at 1 minute, 14 seconds. A flame front advance of 19.5 feet was observed at 6 minutes. Floor burning was noted at 3 minutes.

* Due to lack of air flow through the test chamber, the test was terminated at 6 minutes, 15 seconds. The reported Smoke Density value is at the time of test termination

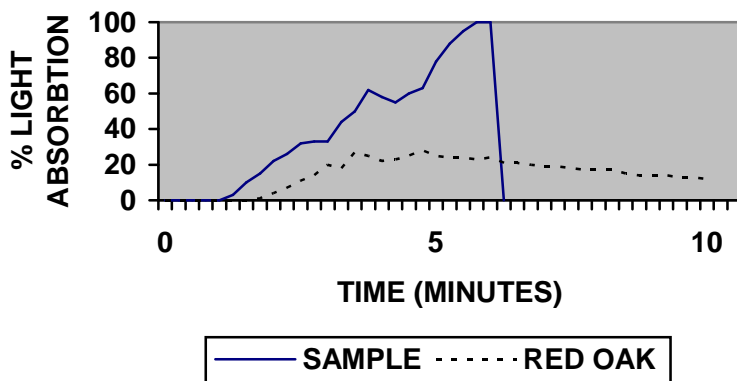
FLAME SPREAD

POLYGAL 35 mm POLYCARBONATE PANELS



SMOKE DENSITY

POLYGAL 35 MM POLYCARBONATE PANELS



End of Report

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