



**CLIENT:** Smooth On Inc.  
2000 ST. John Street  
Easton, PA 18042

<b>Test Report No: 315057</b>	<b>Date: May 27, 2005</b>
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The following sample was submitted by the Client as: 87-209 (1/4 Thick)

**DATE OF RECEIPT:** MAY 16, 2005

**TESTING PERIOD:** MAY 27, 2005

**AUTHORIZATION:** Clients Letter

**TEST REQUESTED:** The submitted sample was tested for Surface Burning Characteristics in accordance with the procedures outlined in ASTM E84-04.

**TEST RESULTS:** Continued on the following pages

**PREPARED BY:**

*Bill Booth*  
**Bill Booth, Technician**  
**Fire Technology**  
dl

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

*Dominick Lepore*  
**Dominick Lepore, Lab Supervisor**  
**Fire Technology**

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**CLIENT: Smooth On Inc.**

**RESULTS:**

**INTRODUCTION:**

This report presents test results of Flame Spread and Smoke Developed Values per ASTM E-84-04. The report also includes Material Identification, Method of Preparation, Mounting and Conditioning of the specimens.

The tests were performed in accordance with the specifications set forth in ASTM E-84-04, Standard Test Method for Surface Burning Characteristics of Building Materials, both as to equipment and test procedure. This test procedure is similar to UL-723, ANSI No. 2.5, NFPA No. 255 and UBC 42-1.

The test results cover two parameters: Flame Spread and Smoke Developed Values during a 10-minute fire exposure. Inorganic cement board and red oak flooring are used as comparative standards and their responses are assigned arbitrary values of 0 and 100, respectively.

**PREPARATION AND CONDITIONING:**

Four pieces 5 feet long X 21 inches wide and 1 piece 4 feet long X 21 inches wide was placed end to end into the fire chamber to form a 24 foot long specimen for testing

The sample was conditioned at  $73^{\circ} \pm 5^{\circ}$  Fahrenheit and  $50 \pm 5\%$  relative humidity.

**TEST PROCEDURE:**

The tunnel was thoroughly pre-heated by burning natural gas. When the brick temperature, sensed by a floor thermocouple, had reached the prescribed  $105^{\circ}$  Fahrenheit  $\pm 5^{\circ}$  Fahrenheit level, the sample was inserted in the tunnel and test conducted in accordance with the standard ASTM E-84-04 procedures.

The operation of the tunnel was checked by performing a 10-minute test with inorganic board on the day of the test.



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**RESULTS:**

**TEST RESULTS:**

The test results, calculated in accordance with ASTM E-84-04 for Flame Spread and Smoke Developed Values are as follows:

Test Specimen	: 87-209 (1/4 Thick)
Flame Spread Index*	: 60
Smoke Developed Value*	: 400

\*Rounded off to the nearest 5 units. Graphs of the Flame Spread, Smoke Developed and Time-Temperature are shown on the attached charts at the end of this report.

**OBSERVATIONS:**

Ignition was noted at 19 seconds followed by charring, dripping, flaming dripping and floor burning down the length of the tunnel. No after burn or after glow was noted.

**RATING:**

The National Fire Protection Association Life Safety Code 101, Section 6-5.3, "Interior Wall and Ceiling Finish Classification", has a means of classifying materials with respect to Flame Spread and Smoke Developed when tested in accordance with NFPA 255, "Method of Test of Surface Burning Characteristics of Building Materials", (ASTM E-84).

The classifications are as follows:

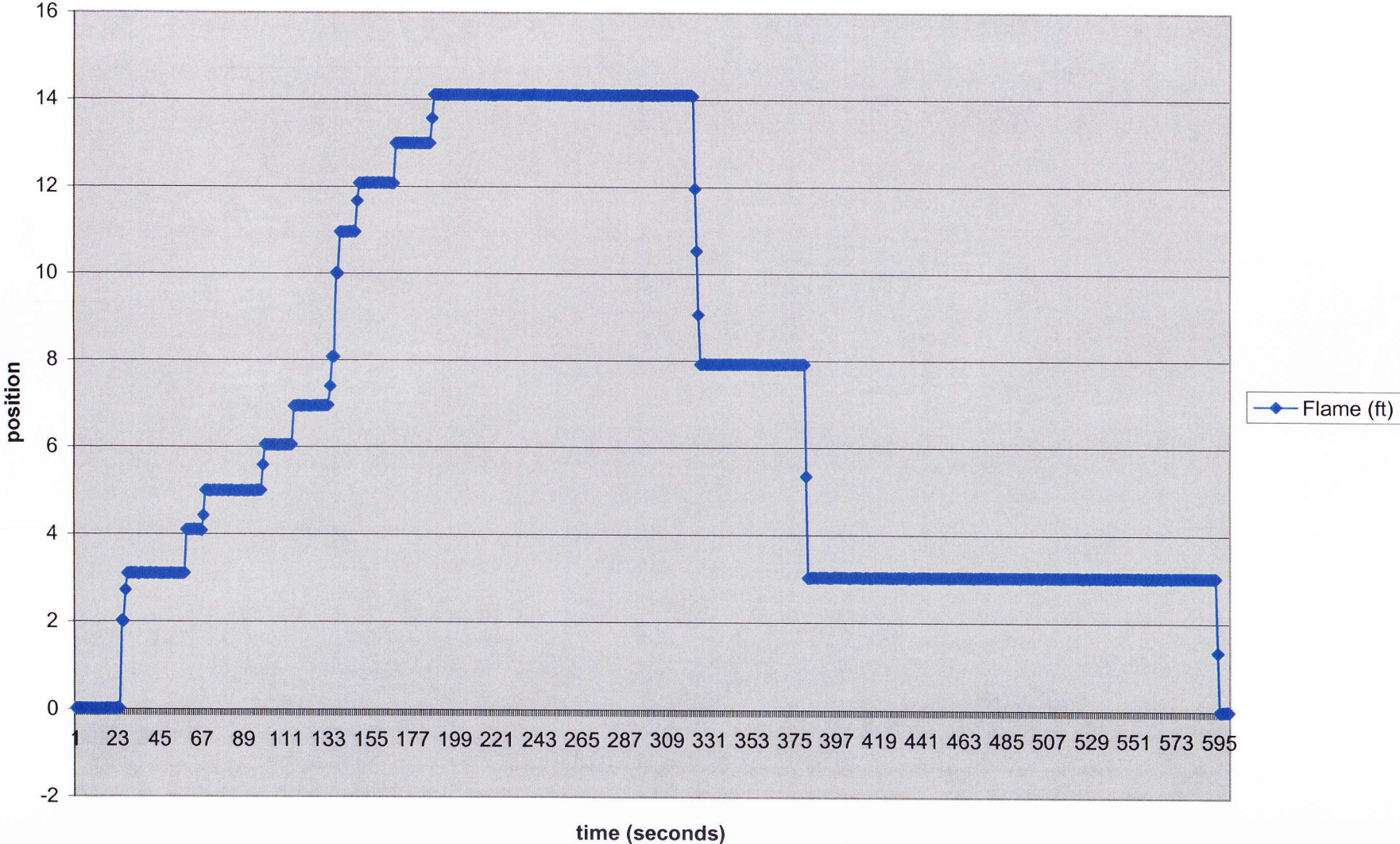
Class A Interior Wall & Ceiling Finish:	Flame Spread -	0-25
	Smoke Developed -	0-450
Class B Interior Wall & Ceiling Finish:	Flame Spread -	26-75
	Smoke Developed -	0-450
Class C Interior Wall & Ceiling Finish:	Flame Spread -	76-200
	Smoke Developed -	0-450

Since the sample received a Flame Spread of 60 and a Smoke Developed Value of 400, it would fall into the Class B Interior Wall & Ceiling Finish Category

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**End of Report**

G:\Fire Tech\Tunnel\April thru June 2005\Smooth On Inc. 315057.xls Flame Position (ft)



G:\Fire Tech\Tunnel\April thru June 2005\Smooth On Inc. 315057.xls Smoke %

