SGS

CLIENT: **IPS Corporation**
P.O. Box 220
Collierville, TN 38017
United States

Test Report No: 177:022625	**Date: May 14, 2009**

The following sample was submitted by the Client as: **Soft Guard PVC Foam 1/8" thick**

DATE OF RECEIPT: **MAY 12, 2009**

TESTING PERIOD: **MAY 13, 2009**

AUTHORIZATION: **Clients email dated 5/11/09**

TEST REQUESTED: The submitted sample was tested for Surface Burning Characteristics in accordance with the procedures outlined in ASTM E84-09.

TEST RESULTS:

Flame Spread Index	Smoke Developed Value
20	315

PLEASE SEE PAGE 3 FOR DETAILED DATA

PREPARED BY:

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Building Materials and Products

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

CLIENT: **IPS Corporation**

INTRODUCTION:

This report presents test results of Flame Spread and Smoke Developed Values per ASTM E84-09. 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 E84-09, 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:

Three Pieces of sample: Soft Guard PVC Foam 1/8" thick, 21 inches wide x 8 feet long were placed into the fire chamber end to end supported on screen and rods, to form a sample 21 inches wide x 24 feet long for testing, that was then covered with inorganic cement boards to protect the chamber lid. The sample was placed with the white side towards the flame, as requested by the client.

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° Fahrenheit ± 5° Fahrenheit level, the sample was inserted in the tunnel and test conducted in accordance with the standard ASTM E84-09 procedures.

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

CLIENT: **IPS Corporation**

TEST RESULTS:

The test results, calculated in accordance with ASTM E84-09 for Flame Spread and Smoke Developed Values are as follows:

Test Specimen	: Soft Guard PVC Foam 1/8" thick
Flame Spread Index*	: 20
Smoke Developed Value*	: 315

*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 occurred at 5 seconds. The following observations were also noted:

- Charring
- Falling
- Dripping
- Floor Burning
- Flaming Dripping
- Afterglow (slight)

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 E84).

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

Rating: The rating for this sample is: ☒ **Class A** ☐ **Class B** ☐ **Class C**

Since the sample received a Flame Spread of 20 and a Smoke Developed Value of 315, it would meet the parameters for a Class A Interior Wall & Ceiling Finish Category.

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End of Report

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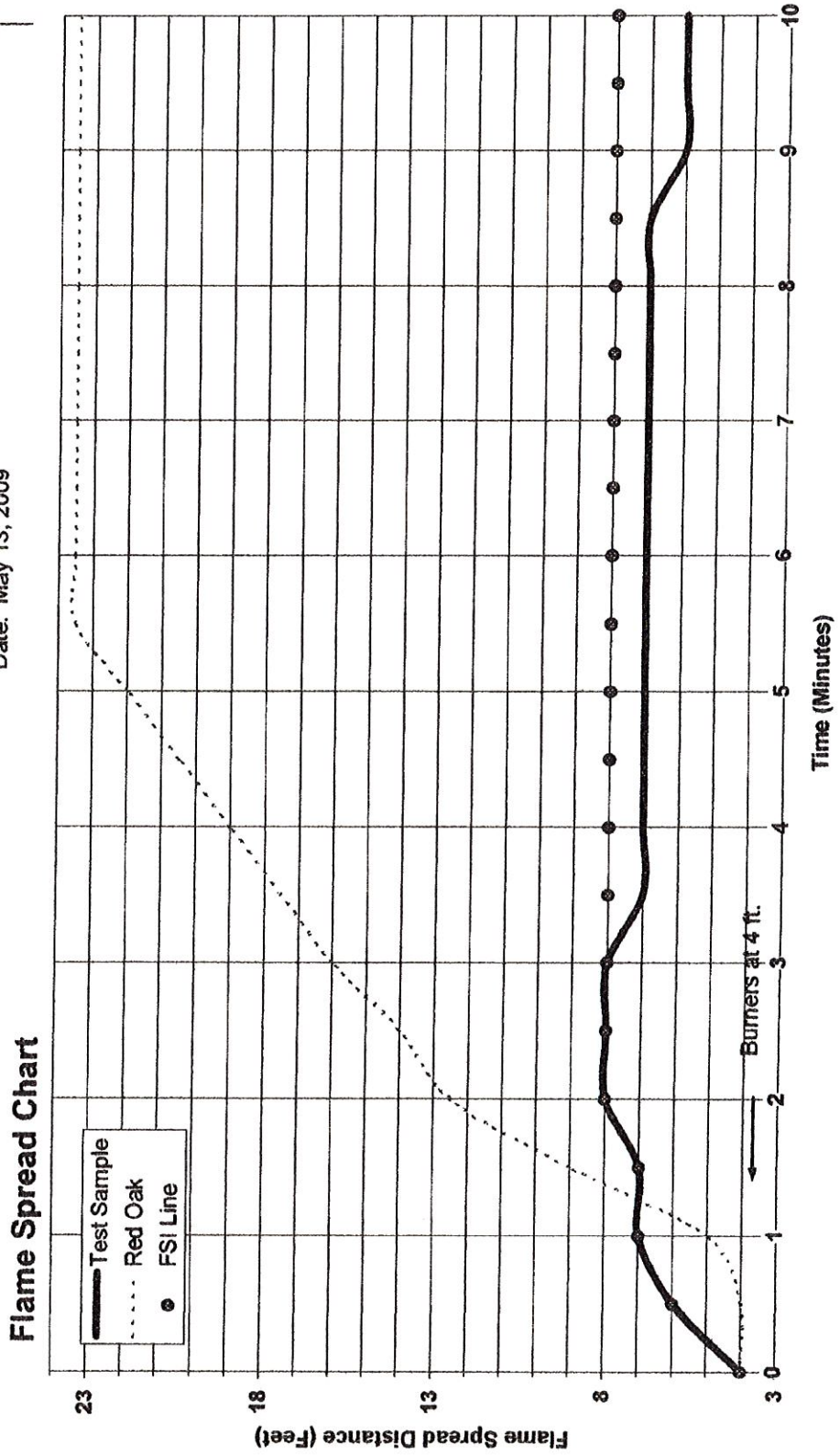

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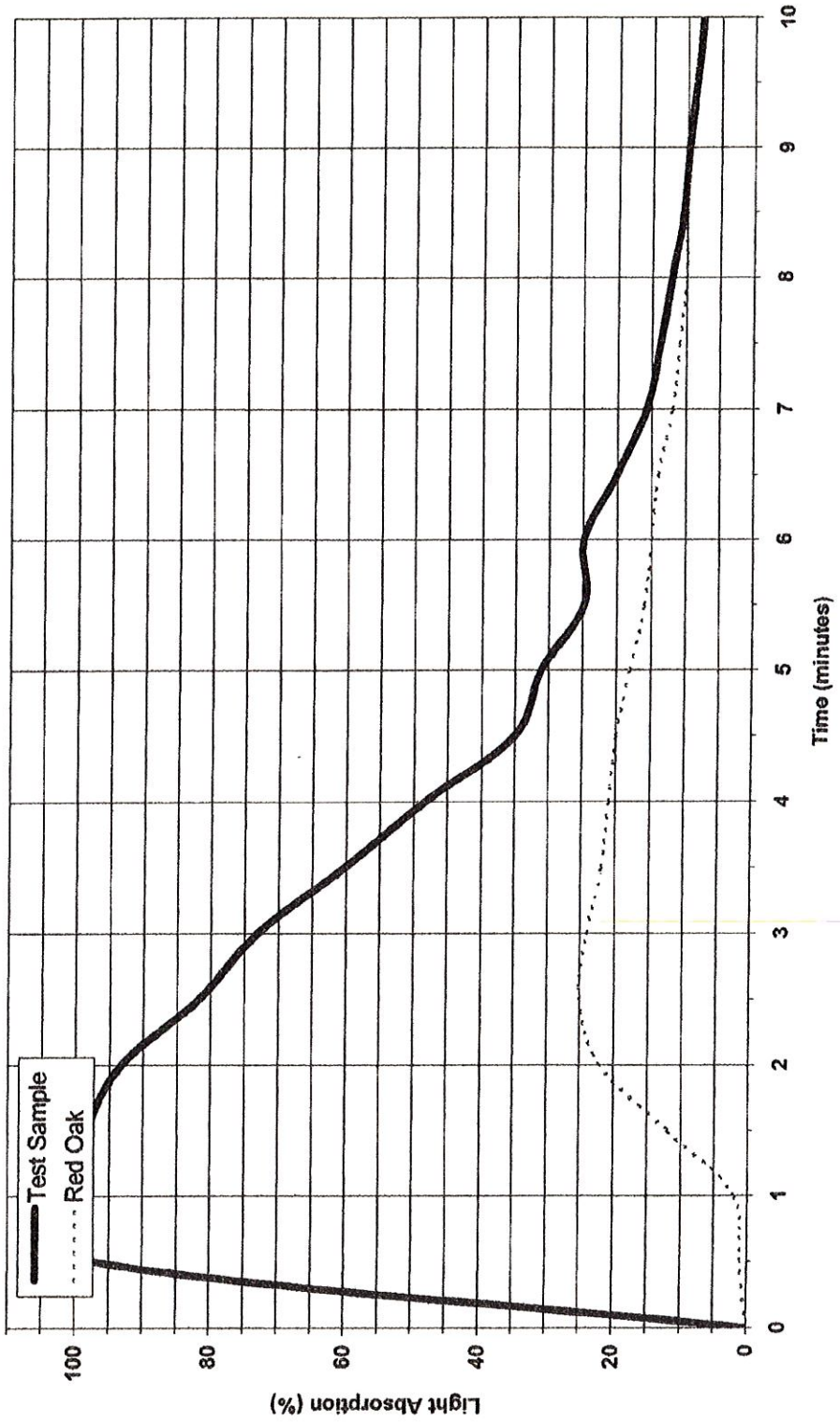
Smoke Developed Chart



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