United States Testing Company, Inc.

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REPORT OF TEST

Engineering Services

CLIENT: Polymer Plastics Corporation
65 Davis Drive
Hauppauge, New York 11788

NUMBER: 111846

July 26, 1994

SUBJECT: **Surface Burning Characteristics of Building Materials**

REFERENCE:

Polymer Plastics Corporation, Order for Test dated June 20, 1994 per Louis Calvo.

Sample Recd.: 7-5-94 Test Date: 7-19-94

TEST PERFORMED:

The submitted sample was tested for Flammability in accordance with the procedures outlined in ASTM E84-91a.

SAMPLE IDENTIFICATION:

One (1) sample of coated panels was submitted and identified by the Client as:

Vitriturf FR

Testing Supervised by:

Steve Caldarola
Senior Supervisor
Fire Technology

SIGNED FOR THE COMPANY
BY

John Lomash
Vice President

SGS Member of the SGS Group (Société Générale de Surveillance)

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INTRODUCTION:

This report presents test results of Flame Spread and Smoke Developed Values per ASTM E84-91a. 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 E84-91a, "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 (3) 24" x 8'0" panels were fitted end to end to form a 24" x 24'0" specimen. Since the samples were self supporting, no further preparation was necessary.

The panels were conditioned at 73° ± 5° Fahrenheit and 50 ± 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° Fahrenheit ± 5° Fahrenheit level, the sample was inserted in the tunnel and test conducted in accordance with the standard ASTM E84-91a 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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TEST RESULTS:

The test results, calculated in accordance with ASTM E84-91a for Flame Spread and Smoke Developed Values are as follows:

Test Specimen:	Vitriturf FR
Flame Spread Index*:	50
Smoke Developed Value*:	540

*Graphs of the Flame Spread, Smoke Developed and Time-Temperature are shown in Figures 1, 2 and 3 at the end of this report.

OBSERVATIONS:

Ignition was noted at 20 seconds along with charring, melting, and drippings of the specimen directly exposed to the flame. Also observed were flaming drippings and floor burning as the flamefront advanced a maximum distance of 14 feet at 9 minutes, 45 seconds. Considerable afterflame was evident upon test completion.

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

Since the sample received a Flame Spread of 50 and a Smoke Developed Value of 540 it cannot be classified as an Interior Wall & Ceiling Finish.