



SGS U.S. Testing Company Inc.

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REPORT NUMBER: 137256-1  
DATE: March 3, 2000  
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CLIENT: Rosco Laboratories Inc.  
52 Harbor View Avenue  
Stamford, Connecticut 06902

SUBJECT: Critical Radiant Flux of Floor Covering Systems

AUTHORIZATION: Client's letter of authorization Feb. 22, 2000 by Michael Sean Graves.

SAMPLE ID: One (1) sample of floor covering was submitted on February 23, 2000 and identified by the Client as:

ADAGIO 2000

TEST PROCEDURE: The submitted sample was tested for Critical Radiant Flux in accordance with the procedures outlined in ASTM E648-97 Standard Test Method for Critical Radiant Flux of Floor Covering Systems using a Radiant Heat Energy Source. This test procedure is similar to NFPA 253, FTM No. 372, and NBSIR 75-950.

TEST DATES: March 3, 2000.

PREPARED BY:

Nikolay Kitov, Technician  
Fire Technology

SIGNED FOR THE COMPANY BY:

John Van Houten  
Supervisor

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Member of the SGS Group

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REPORT OF TEST

**CLIENT:** Rosco Laboratories Inc.

**PREPARATION AND CONDITIONING:**

Client supplied adhesive mortar (#500 Latex) was applied to three (3) 10-inch by 42-inch sections of IC board. The submitted sample was placed over the adhesive, pressed using a roller and allowed to cure for 48 hours prior to testing.

The specimens were conditioned at  $70^{\circ} \pm 5^{\circ}$  Fahrenheit and 50% Relative Humidity.

**TEST PROCEDURE:**

The test chamber was thoroughly pre-heated and allowed to stabilize with the radiant panel at a black body temperature of  $500 \pm 5^{\circ}$  Celsius. The pilot burner was ignited and the specimen inserted into the chamber. After a five minute pre-heat, the pilot burner flame was placed in contact with the specimen for five minutes, then removed. The test was continued until all flaming ceased. The distance burned was measured and converted to Critical Radiant Heat Flux at flame out.

The operation of the test chamber was checked by performing a flux profile measurement at the 50 cm point on the day of the test.

CLIENT: Rosco Laboratories Inc.

**TEST RESULTS:**

The test results, determined in accordance with the prescribed method of Critical Radiant Flux, are as follows:

<u>Test Specimen</u>	<u>*Critical Radiant Heat Flux, Watts/cm<sup>2</sup></u>
1	1.02
2	0.94
3	1.00
Average	0.98

Standard Deviation: 0.04

\*See graph appended at the end of this report.

**OBSERVATIONS:**

Ignition was noted along with charring and bubbling of the specimens upon pilot contact. The specimens burned a maximum distance of 12.0 cm, 17.0 cm, and 14.0 cm, respectively.

**RATING:**

The National Fire Protection Association Life Safety Code 101 Section 6-5.4, "Interior Floor Finish Classification" has a means of classifying materials with respect to Critical Radiant Flux when tested in accordance with NFPA 253, "Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source" (ASTM E648-97).

The classifications are as follows:

Class I Interior Floor Finish: Critical Radiant Flux, minimum of 0.45 W/CM<sup>2</sup>.

Class II Interior Floor Finish: Critical Radiant Flux, minimum of 0.22 W/CM<sup>2</sup>.

Since the sample had an average Critical Radiant Flux of 0.98 W/CM<sup>2</sup> it would fall into the Class I Interior Floor Finish category.

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End of Report

REPORT OF TEST

FILE

Sample o o o

TEST DATE: March 3, 2000

TEST NO. 137256-1

I.D. ADAGIO 2000

PREP: Glue Down

