EXPLORATORY EVALUATION

BY

ASTM E84 FIRE TEST METHOD

ON

FIBER FREE SONEX CURTAIN

for

ILLBRUCK, INC.

3800 WASHINGTON AVE., NORTH

MINNEAPOLIS, MN 55412

J.I. 3B7Q1.AM
(4820)
July 1, 1996

Factory Mutual System

Factory Mutual Research

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P.O. Box 9102
Norwood, Massachusetts 02062

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I INTRODUCTION

Illbruck, Inc. submitted samples which they designated as Fiber Free Sonex Curtain material for evaluation per ASTM E84 Fire Test Method.

The ASTM E84 Test Method subjects materials to limited fire conditions when tested in a horizontal ceiling application. The test results may not indicate the material's actual burning characteristics when field installed in a vertical position.

Also, the sample mounting prescribed in this test method may not produce a fire behavior representative of actual building fires.

The material tested is not manufactured under the Factory Mutual Research follow-up inspection and reexamination program; therefore, the manufacturer cannot use the Factory Mutual Research name for marking or advertising the material.

The manufacture of the test samples was not monitored by FMRC and any descriptions or designations of sample construction were supplied by the Client.

The product is not Approved, except where separately listed in the Factory Mutual Research Approval Guide for specific end-use application.

II TEST METHOD

Tests were conducted in accordance with the Standard Method of Test for "SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS", ASTM Designation E84 (95a). The results yield Flame Spread and Smoke Density values for the test materials during a 10 minute fire exposure.

The purpose of this test is to determine the comparative surface burning characteristics of building materials by evaluating the flame spread performance of Red Oak under identical conditions. The Flame Spread and Smoke Density value of the material may be compared with that of cement board and Red Oak which have been arbitrarily established as 0 and 100, respectively.

III TEST RESULTS

The following are the ASTM E84 test results deveoped on Fiber Free Sonex Curtain material supplied by Illbruck, Inc. The tests were conducted on June 26, 1996 under J.I. 3B7Q1.AM.

The test samples were supported by 2 in. (51 mm) hexagonal wire mesh and 1/4 in (6 mm) dia. Steel rods on a nominal 2 ft. (0.6 m) spacing.

Sample #1:

3/8 in. (9.5 mm) thick FF-BB Fiber Free Barrier Backed Sonex Curtain Panel (Quilted Wiltec Melamine Foam and a 1 lb psf reinforced loaded vinyl noise barrier)
One 24 ft (7.2 m) long piece. Quilted surface exposed to the fire.

Flame Spread	21
Smoke Density	171
Observations	0:04 Ignition of sample
	7:39 Maximum flame spread of 4.5 ft. (1.35 m)

Sample #2:

3/8 in. (9.5 mm) thick FF-BB Fiber Free Barrier Backed Sonex Curtain Panel (Quilted Wiltec Melamine Foam- Fire Retardant Treatment- , 1 lb psf reinforced loaded vinyl noise barrier).
One 24 ft. (7.2 m) long piece. Quilted surface exposed to the fire.

Flame Spread	23
Smoke Density	152
Observations	0:04 Ignition of sample
	7:39 Maximum flame spread of 5 ft (1.5 m)

Caution: These numerical Flame Spread and Smoke Density values are not intended to reflect the hazards presented by this or any material under actual fire conditions.

The products of combustion were not analyzed nor is it required by the ASTM E84 Test Method.

IV LABORATORY REQUIREMENTS

Factory Mutual Research makes no judgment of product uniformity solely as a result of this fire evaluation. Product uniformity depends in part on manufacturing facilities and quality control procedures. Factory Mutual Research's Audit Inspection and Reexamination Program provides a means to assess these conditions.

The products tested under this program are not manufactured under Factory Mutual Research's Audit Inspection program and the composition of the samples was not verified by Factory Mutual Research.

Factory Mutual makes no judgment of product suitability for its intended end-use based entirely on ASTM E84 test results. This decision is usually the prerogative of the local authority having jurisdiction.

TEST SUPERVISED AND REPORT BY:

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