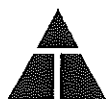


2693 Rocket was tested and met the following flammability requirements:

ASTM E 84 Unadhered Class A
CA TB 117-2013
UL Listed



TEXTILE TESTING

CERTIFIED BEAUTY.

Report Number: 70838
Date: 03-04-2015

CERTIFICATE OF TESTING

For the Account Of: Desingtex
357 County Ave.
Secaucus, NJ 07094
Contact: Teesha Prezeau

Client's Identification: Rocket 2693, Nanotex®

TEST PERFORMED Standard Method of Test for Surface Burning Characteristics of Building Materials ASTM E84-13a
Unadhered

TEST RESULTS

Test Specimen	Flame Spread Index	Smoke Developed Index
Reinforced Cement Board	0	0
Rec Oak Flooring	100	100
Rocket 2693	5	50

Specimen Data

Time to Ignition	00.08 (min)
Maximum Flame Spread	01.42 (ft)
Time to Maximum Flame Spread	00.65 (min)

ACCEPTANCE CRITERIA

Class	Flame Spread Index	Smoke Development Rating
1 or A	0 - 25	0 - 450 maximum
2 or B	26 - 75	0 - 450 maximum
3 or C	76 - 200	0 - 450 maximum

CONCLUSION Based on the above Results and Acceptance Criteria, the item tested is:

- ☒ Class 1 or A
- ☐ Class 2 or B
- ☐ Class 3 or C
- ☐ Unrated

DISCUSSION

This test is certified for ASTM E84 by the Southern Building Code Congress International (SBCCI) as a testing laboratory for Fire and Materials testing, Evaluation Report Number TL-9606 (Commercial Testing), and by the United States Department of Commerce, National Institute of Standards and Technology (NIST), through the National Voluntary Laboratory Accreditation Program (NVLAP) for compliance with criteria set forth in NIST Handbook 150:2001, all requirements of ISO/IEC 17025:1999, and relevant requirements of ISO 9002:1994.

This report is provided for the exclusive use of the client to whom it is addressed. It may be used in its entirety to gain product acceptance from daily-constituted authorities. The test results presented in this report apply only to the samples tested and are not necessarily indicative of apparent identical or similar materials. The client provided sample selection and identification. A sampling plan, if described in the referenced test procedure, was not necessarily followed. This report shall not be used under any circumstance in advertising to the general public.

Introduction

This report is a presentation of results of a surface flammability test on a material submitted by client.

The test was conducted in accordance with the American Society for test and Materials fire test response standard E84-13a, Surface Burning Characteristics of Building Materials, sometimes referred to as the Steiner Tunnel test. This test is applicable to exposed surfaces such as walls and ceilings. The test is conducted with the specimen in the ceiling position with the surface to be evaluated exposed face down to the ignition source. The method, which is similar to NFPA No. 255 and UL No. 723, is an American National Standard (ANSI) and has been approved for use by agencies of the Department of Defense for listing in the DoD Index of Specifications and Standards.

This standard is used to measure and describe the response of materials, products, or assemblies to heat and flame under controlled conditions, but does not by itself incorporate all factors required for fire-hazard or fire-risk assessment of materials, products, or assemblies under actual fire conditions.

The purpose of the test is to provide only the comparative measurements of surface flame spread and smoke development of materials with that of select grade red oak and reinforced cement board under specific fire exposure conditions. The test exposes a nominal 24-foot long by



CERTIFICATE OF TESTING

20-inch wide test specimen to a controlled airflow and flaming fire adjusted to spread the flame along the entire length of a red oak specimen in 5.50 minutes. During the ten-minute test duration, flame spread over the specimen surface and density of the resulting smoke are measured and recorded. Test results are calculated relative to red oak, which has an arbitrary rating of 100, and reinforced cement board, which has a rating of 0.

The test results are expressed as Flame Spread Index and Smoke Developed Index. The Flame Spread Index is defined in ASTM E 176 as a number or classification indicating a comparative measure derived from observations made during the progress of the boundary of a zone of flame under defined test conditions. The Smoke Developed Index, a term specific to ASTM E-84, is defined as a number or classification indicating a comparative measure derived from smoke obscuration data collected during the test for surface burning characteristics. There is not necessarily a relationship between the two measurements.

The method does not provide for measurement of heat transmission through the surface tested, the effect of aggravated flame spread behavior of an assembly resulting from the proximity of combustible walls and ceilings, or classifying a material as noncombustible solely by means of a Flame Spread Index.

The zero reference and other parameters critical to furnace operation are verified on the day of the test by conducting a 10-minute test using 1/4-inch reinforced cement board. Periodic tests using NOFMA certified 23/32-inch select grade red oak flooring provide data for the 100 reference.

Test Sample

The test sample, selected by the client was tested using three test panels, each measuring two feet wide by eight feet in length, were prepared by adhering the material to a 5/8-inch thick USG Firecode Type X gypsum wallboard using Gibson Homans Shur Stik 111 Heavy Duty Wallcovering Adhesive. The adhesive was applied to the back of the wallcovering, the material placed onto the face of the gypsum board, and smoothed with a brush and roller. After dead-stacking overnight, the prepared panels were transferred to storage racks and conditioned to equilibrium in an atmosphere with the temperature maintained at 71 +/- 2°F and the relative humidity at 50 +/- 5 percent. For testing, the panels were placed end-to-end on the ledges of the tunnel furnace and tested with no auxiliary support mechanism. This method of sample preparation is described in appendix X1 of the E-84 standard, Guide to Mounting Methods, Section X1.9.3.

Test Results

The test sample, selected by the client was conditioned to equilibrium in an atmosphere with the temperature maintained at 71 +/- 2°F and the relative humidity at 50 +/- 5 percent. For testing, two 12-foot lengths of the fabric were free laid over a 2-inch hexagonal wire mesh supported by 1/4-inch diameter steel rods spanning the ledges of the tunnel furnace at 24-inch intervals. This method of sample support is described in appendix X1 of the E-84 standard, Guide to Mounting Methods, Section X1.1.2.2 and X1.1.2.3.

Clarification on Codes

Code officials frequently use the Flame Spread Index and Smoke Developed Index values obtained by the ASTM E-84 test and regulatory agencies in the acceptance of interior finish materials for various applications. The most widely accepted classification system is described in the National Fire Protection Association publication NFPA 101 Life Safety Code, where:

Standard Classification System

Class	Flame Spread Index	Smoke Development Rating
1 or A	0 - 25	0 - 450 maximum
2 or B	26 - 75	0 - 450 maximum
3 or C	76 - 200	0 - 450 maximum

Class A, B and C correspond to Type I, II, and III respectively in other codes such as SBCCI, BOCA, and ICBO. They do not preclude a material being otherwise classified by the authority of jurisdiction.

The description of the test procedure and specimen evaluated, as well as the observations and results obtained, contained herein are true and accurate within the limits of sound engineering practice. These test results were obtained from an outside source. A copy of the original document is kept on file at Applied Textiles.

CERTIFICATION I certify that the above results were obtained after testing specimen in accordance with the procedures and equipment specified by the standard stated above. These test results were obtained from an outside source.

Berla Silver

Authorized Signature-MB

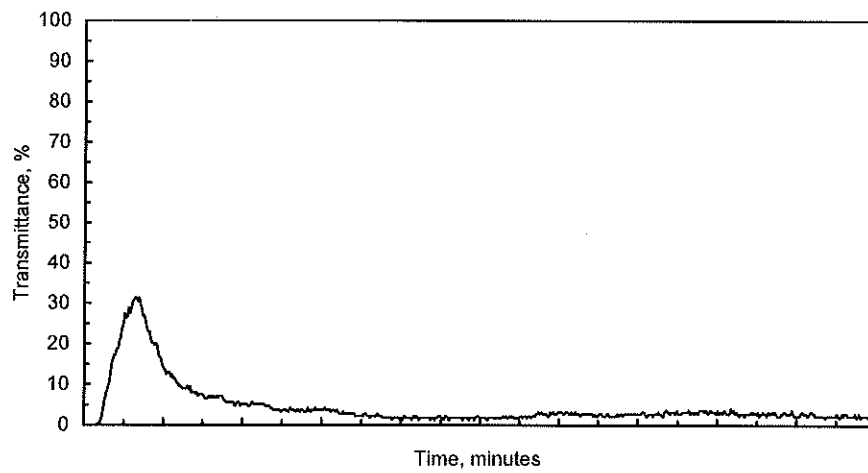
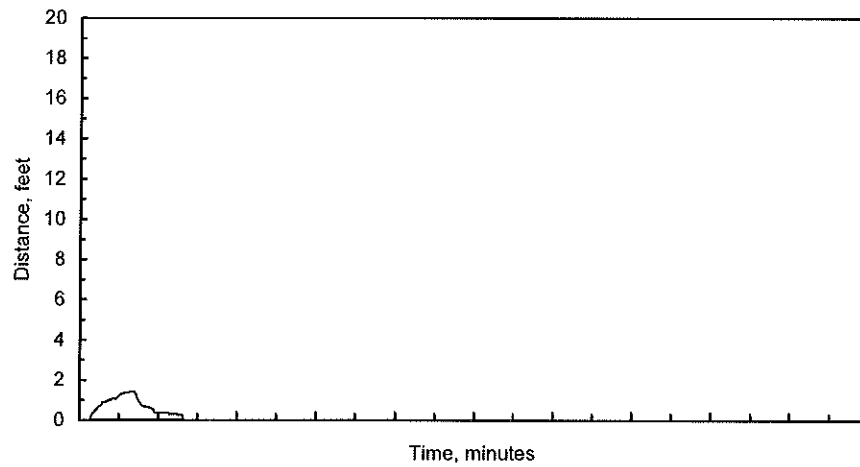
ASTM E 84 TEST DATA

Client: Applied Textiles
Test Number: 4652-4272
Material Tested: Rocket
Date: March 19, 2015

Test Results:

Time to Ignition = 00.08 minutes
Maximum Flamespread Distance = 01.42 feet
Time to Maximum Spread = 00.65 minutes

Flame Spread Index = 5
Smoke Developed Index = 50





TESTING CERT. #3193.01

Report Number: 18-005295

Revision Number:1

Date Order Received: 08/29/2018

For the Account of: Designtex
357 County Ave
Secaucus, NJ 07094

Client's Identification: Rocket

CERTIFICATE OF TESTING

TEST PERFORMED: California Technical Bulletin 117: June 2013 – Requirements, Test Procedure and Apparatus for Testing the Smolder Resistance of Materials Used in Upholstered Furniture – Cover Fabric Test

TEST RESULTS

	Specimen	Char Length (in)	Extinguished in 45 Minutes
Initial Test	1	0.6	Y
	2	0.6	Y
	3	0.6	Y

NOTES

Test Conditions: 70 ±5°F, 50 ±5% Relative Humidity

Dev-009: Used SRM 1196 Equivalent YES
Lot # 18141030602

ACCEPTANCE CRITERIA

A material is considered to pass or fail based on the following criteria:

1. A single mock-up test specimen fails to meet the requirements of this test procedure if any of the following criteria occurs:
 - a. The mock-up test specimen continues to smolder after the 45 minute test duration
 - b. A vertical char length of more than 1.8 inches (45mm) develops on the cover fabric
 - c. The mock-up test specimen transitions to open flaming
2. The cover fabric passes the test if three initial mock-up specimens pass the test, i.e. the cigarettes burn their full length and are no longer smoldering
3. If more than one initial specimen fails, the cover fabric fails the test
4. If any one of the three initial specimens fails, repeat the test on additional three specimens
5. If all three additional specimens pass the test, the cover fabric passes the test. If any one of the additional three specimens fails, the cover fabric fails the test

CONCLUSION Based on the above Results and Acceptance Criteria, the item tested is:

☒ Pass

☐ Fail

CERTIFICATION I certify that the above results were obtained after testing specimen in accordance with the procedures and equipment specified by the standard stated above.

Berta Stiver

Authorized Signature

Date Order Completed: 09/11/2018