

Test Report

No. AJFS2111009514FF

Date: NOV.29, 2021

Page 1 of 6

JIANGSU JOYO JINGHUA ACOUSTIC MATERIALS TECHNOLOGY CO., LTD.

1# NANWO MIDDLE ROAD, PANWAN TOWN SHEYANG DISTRICT, YANCHENG CITY, JIANGSU PROVINCE, CHINA

Sample Description: POLYESTER FIBER ACOUSTIC PANEL

SGS Ref No.: AJHL2111003979OT

Style / Item No.: /

The above sample(s) was / were submitted and identified on behalf of the client. SGS is not responsible for the authenticity, integrity and results of the data and information and / or the validity of the conclusion arising therefrom. Results apply to the sample as received.

Test Requested:

ASTM E84-2021a Standard Test Method for Surface Burning Characteristics of Building Materials.

Test Results: -- See attached sheet --

Test Period:

Sample Receiving Date : NOV.10, 2021

Test Performing Date : NOV.10, 2021 TO NOV.25, 2021

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Anji Branch



Allen Zou
Approved Signatory

scan to see the report



AJFS2111009514FF



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SGS-CSTC Standards Technical Services Co., Ltd.
Anji Branch Fire Technology Service

No. 301, Sunlight Road, 2 Block, Sunlight Industry Zone, Anji County, Zhejiang Province, China 313300 t (86-572) 5018825 f (86-572) 5018829 www.sgs.com.cn
中国·浙江·安吉县阳光工业园二区阳光大道301号 邮编:313300 t (86-572) 5018825 f (86-572) 5018829 e sgs.china@sgs.com

I. TEST CONDUCTED

This test was conducted in accordance with ASTM E84-2021a Standard Test Method for Surface Burning Characteristics of Building Materials.

II. INTRODUCTION

The method, designated as ASTM E84-2021a, Standard Method of Test for Surface Burning Characteristics of Building Materials, is designed to determine the relative surface burning characteristics of materials under specific test conditions. Results are expressed in terms of flame spread index (FSI) and smoke developed index (SDI).

The purpose of this test method is to determine the relative burning behavior of the material by observing the flame spread along the specimen. Flame spread and smoke developed index are reported. However, there is not necessarily a relationship between these two measurements.

III. TEST PROCEDURE

The tunnel is preheated to 65.6°C (150°F), as measured by the floor-embedded thermocouple located 7.09m (23.25 ft) downstream of the burner ports, and allowed to cool to 40.6°C (105°F), as measured by the floor-embedded thermocouple located 3.96m (13 ft) from the burners. At this time the tunnel lid is raised and the test sample is placed along the ledges of the tunnel so as to form a continuous ceiling 7.32m (24 ft) long, 304.8mm (12 in) above the floor. The lid is then lowered into place.

Upon ignition of the gas burners, the flame spread distance is observed and recorded every 30 seconds. Flame spread distance versus time is plotted ignoring any flame front recessions. If the area under the curve (A) is less than or equal to 97.5 ft·min, $FSI = 0.515 \cdot A$; if greater, $FSI = 4900 / (195 \cdot A)$.

The test results for smoke shall be plotted and the area under the curve shall be divided by the area under the curve for heptane, multiplied by 100, and rounded to the nearest multiple of five to establish a numerical smoke-developed index (SDI).

IV. CONDITIONING

Prior to testing, the sample was conditioned,

To a constant weight at a temperature of 23±2.8°C (73.4±5°F) and at a relative humidity of 50±5%.

To be continued....



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Sample details

Sample description	Polyester Fiber Acoustic Panel
Color / Density	White / About 198.4 kg/m ³

Exposed face: The front face

Mounting methods:

The specimen was self-supporting and placed directly on the inner ledges of the tunnel.

The specimen consisted of 3 pieces of 600 mm wide by 2440 mm long by 9.1mm thickness and all sections jointed end-to-end.

Test results:

FSI	SDI
30	450

Rating:

The National Fire Protection Association Life Safety Code 101, Chapter 10, Section 10.2.3 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 ASTM E84 or UL 723 Method of Test of Surface Burning Characteristics of Building Materials.

International Building Code, Chapter 8, Interior Finishes, Section 803 Wall and Ceiling Finishes, was classified in accordance with ASTM E 84 or UL 723. Such interior finish materials shall be grouped in the following classes in accordance with their flame spread and smoke-developed indexes.

The classifications are as follows:

Index	Class A	Class B	Class C
Flame Spread Index	0-25	26-75	76-200
Smoke-developed Index	0-450	0-450	0-450

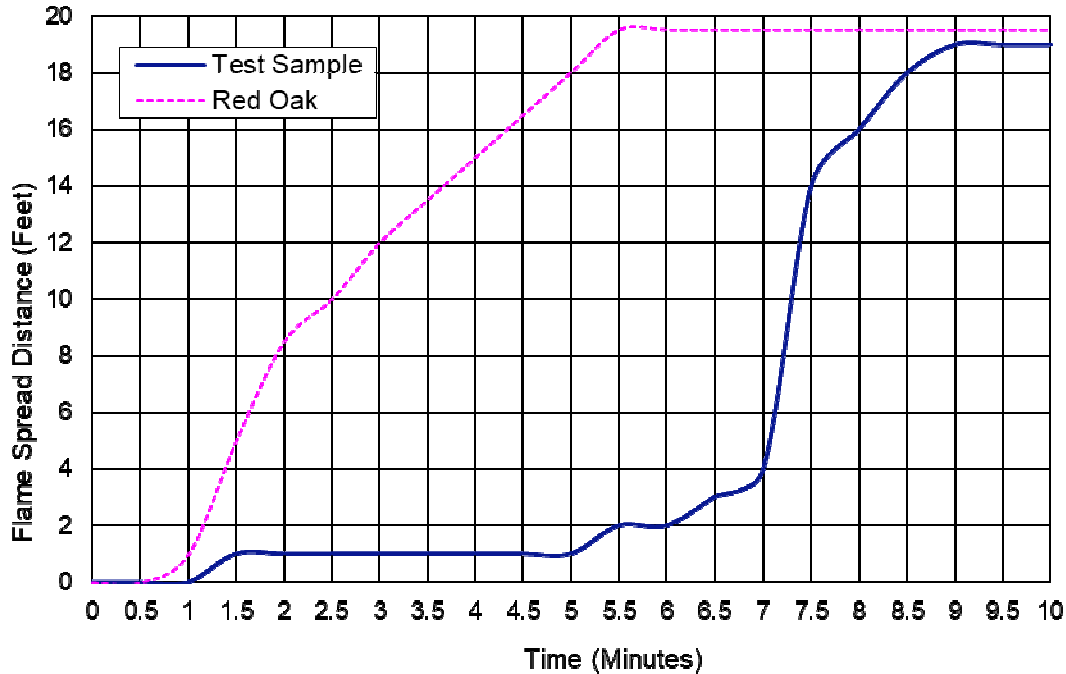
Since the tested sample received a Flame Spread Index 30 and a Smoke-developed Index 450, it would meet the requirements of Class B interior Wall & Ceiling Finish Category.

To be continued....

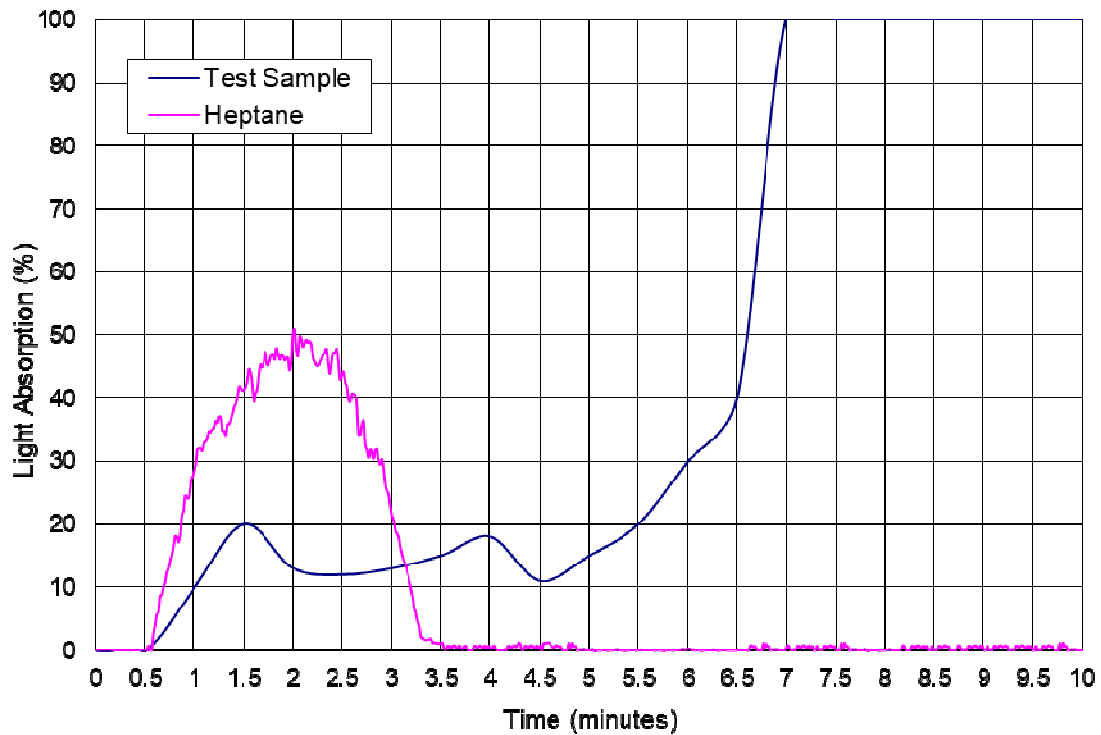


Graphical results:

Flame Spread Chart



Smoke Developed Chart



To be continued....



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Observations:

Time to ignition (sec)	203
Time to Max. FS (sec)	19
Maximum FS (feet)	533
Observations	Flaming Dripping, Floor burning

WARNING:

The use of supporting materials on the underside of the test specimen has the ability to lower the flame spread index from those which might be obtained if the specimen could be tested without such support. These test results do not necessarily relate to indices obtained by testing materials without such support. Testing of materials that melt, drip, or delaminate to such a degree that the continuity of the flame front is destroyed, results in low flame spread indices that do not relate directly to indices obtained by testing materials that remain in place.

The test results relate only to the specimens of the product in the form in which were tested. Small differences in the composition or thickness of the product may significantly affect the performance during the test and may therefore invalidate the test results. Care should be taken to ensure that any product, which is supplied or used, is fully represented by the specimens, which were tested.

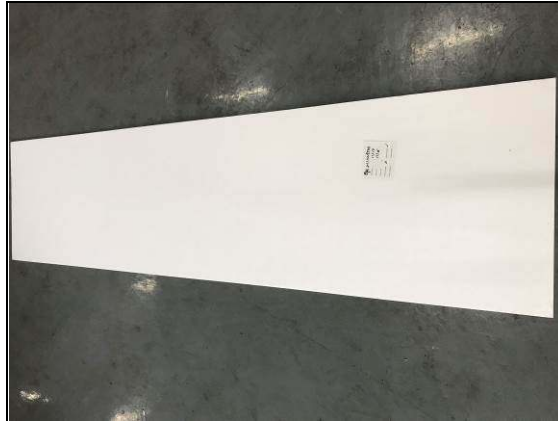
Statement: This declaration of conformity is only based on the result of this laboratory activity, the impact of the uncertainty of the results was not included.

Remark: The test method is not in CMA accredited scope. The test report shall only be used for client internal reference.

To be continued....



Photo Appendix:



SGS authenticate the photo on original report only

End of Report



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