

PT. TOILON INDONESIA

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**THE TEST REPORT IS TO SUPERSEDE THE TEST REPORT No.: AJFTS25002056R01_EN,
DATE: Apr 22,2025.**

Sample Description : TOILON THERMOTECH IXPE FR CLASS 0
***Color** : ALUMINIUM FOIL: SILVER
IXPE FOAM: BLACK
Composition : PHYSICALLY CROSSLINKED FOAM WITH ALUMINUM FOIL
Thickness : 15 mm
Density : 25 Kg/m3 (FOAM ONLY)

The above sample(s) data and information 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.

Sample Receiving Date : Apr 11,2025
Testing Period : Apr 11,2025 to Apr 21,2025
Test Required : ASTM E84-2024 Standard Test Method for Surface Burning Characteristics of Building Materials.
Test result(s) : See attached sheet

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

Eva Zhang
Approved signatory



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SGS-CSTC Standards Technical Services Co., Ltd.
Anji Branch Inspection & Testing Service

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I. Test conducted

This test was conducted in accordance with ASTM E84-2024 Standard Test Method for Surface Burning Characteristics of Building Materials.

II. Introduction

The method, designated as ASTM E84-2024, 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·A; if greater, FSI = 4900/(195-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%.



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Sample details

Sample description	Foam + Aluminum foil
Color	Foam side: black; Aluminum foil side: silver
Thickness	15.0mm
Exposed face	Aluminum foil surface

Mounting methods:

The 20-gage, 2-in. (51-mm) hexagonal galvanized steel netting should span the width of the tunnel, then the specimen shall be placed on the netting.

The specimen is 1 piece of 595mm wide by 7220mm long.

Test results:

Flame Spread Index, FSI	Smoke-developed Index, SDI
0	50

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 0 and a Smoke-developed Index 50, it would **meet** the requirements of **Class A** interior Wall & Ceiling Finish Category.



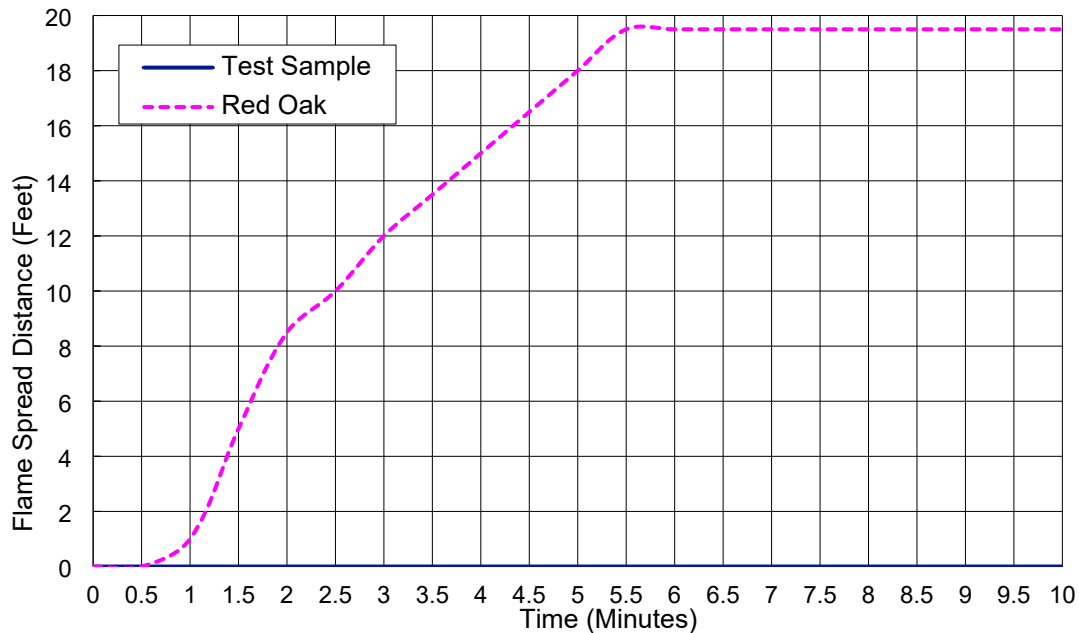
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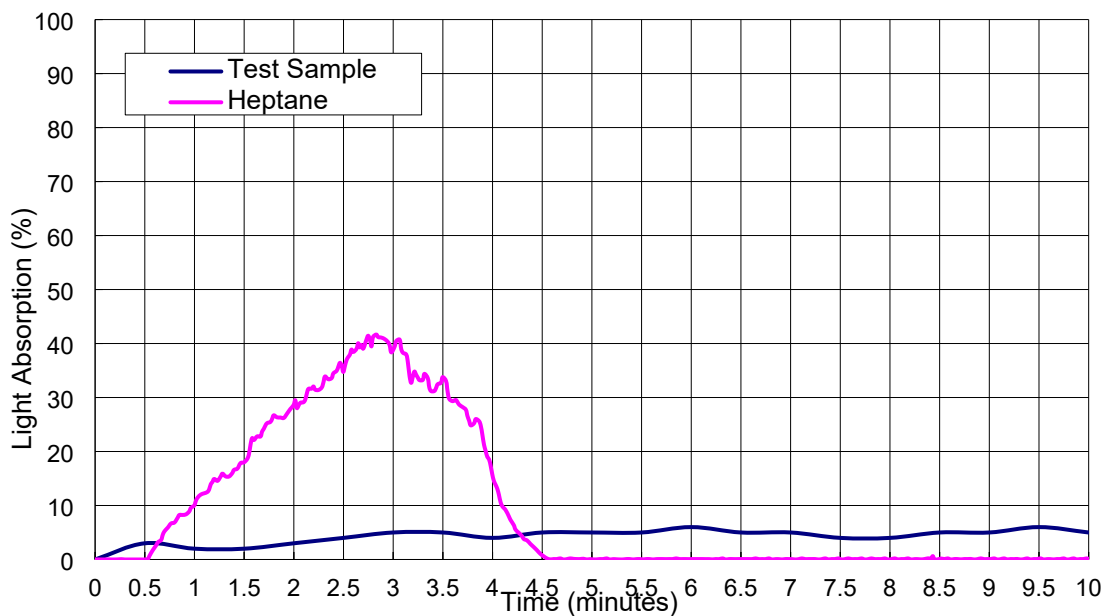
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Graphical results:

Flame Spread Chart



Smoke Developed Chart



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Observations:

Time to ignition (sec)	182
Time to Max. FS (sec)	Not Applicable
Maximum FS (feet)	Not Applicable
Observations	None

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 content remark with * is updated.

End of Report



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