GALE PACIFIC SPECIAL TEXTILE(NINGBO) LIMITED
NO.777 HENGSHAN W. ROAD, BEILUN, NINGBO, CHINA

The following sample(s) was/were submitted and identified on behalf of the client as:

Sample Description	:	GALE COMMERCIAL HEAVY 430:HDPE knitted fabric in Natural
Test Performed	:	Selected test(s) as requested by applicant
Sample Receiving Date	:	Sep 19, 2016
Testing Period	:	Sep 19, 2016 - Oct 18, 2016
Test Result(s)	:	Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. For further details, please refer to the following page(s).

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

Campus Cao

Campus Cao (Account Executive)

SGS-CSTC Standards Technical Services Co., Ltd. Ningbo Branch Textile Laboratory
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Test Result ***

I. TEST CONDUCTED

This test was conducted in accordance with ASTM E84-15a Standard Test Method for Surface Burning Characteristics of Building Materials.

II. INTRODUCTION

The method, designated as ASTM E84-15a, "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 150℉, as measured by the floor-embedded thermocouple located 23.25 feet downstream of the burner ports, and allowed to cool to 105℉, as measured by the floor-embedded thermocouple located 13 feet 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 24 feet long, 12 inches 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 15 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 min·ft, FSI = 0.515·A; if greater, FSI = 4900/(195-A). Smoke developed is determined by comparing the area under the obscuration curve for the test sample to that of inorganic reinforced cement board and red oak, arbitrarily established as 0 and 100, respectively.

IV. CONDITIONING

Prior to testing, the sample was conditioned,

To a constant weight at a temperature of 73.4±5℉ (23±2.8℃) and at a relative humidity of 50±5%

V. SAMPLE DETAILS

Sample Description	1-F-K NATURAL HDPE
Color / Density	Beige / About 427 g/m^2

To be continued….

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Exposed face:
The front face

MOUNTING METHODS:
The 20-gage, 2-in. (51-mm) hexagonal galvanized steel netting should span the width of the tunnel, then the width of the tunnel, then the specimen shall be placed on the netting
The specimen consisted of 1 piece of 600mm wide×7200mm long x1.5mm thickness and all sections jointed end-to-end.

TEST RESULTS

FSI	SDI
20	165

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 NFPA 255, ASTM E84, 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:

	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 20 and a Smoke Developed 165, it would meet the requirement of Class A interior Wall & Ceiling Finish Category.

OBSERVATIONS

Time to ignition (sec)	10
Time to Max. FS (sec)	114
Maximum FS (feet)	4

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GRAPHICAL RESULTS:

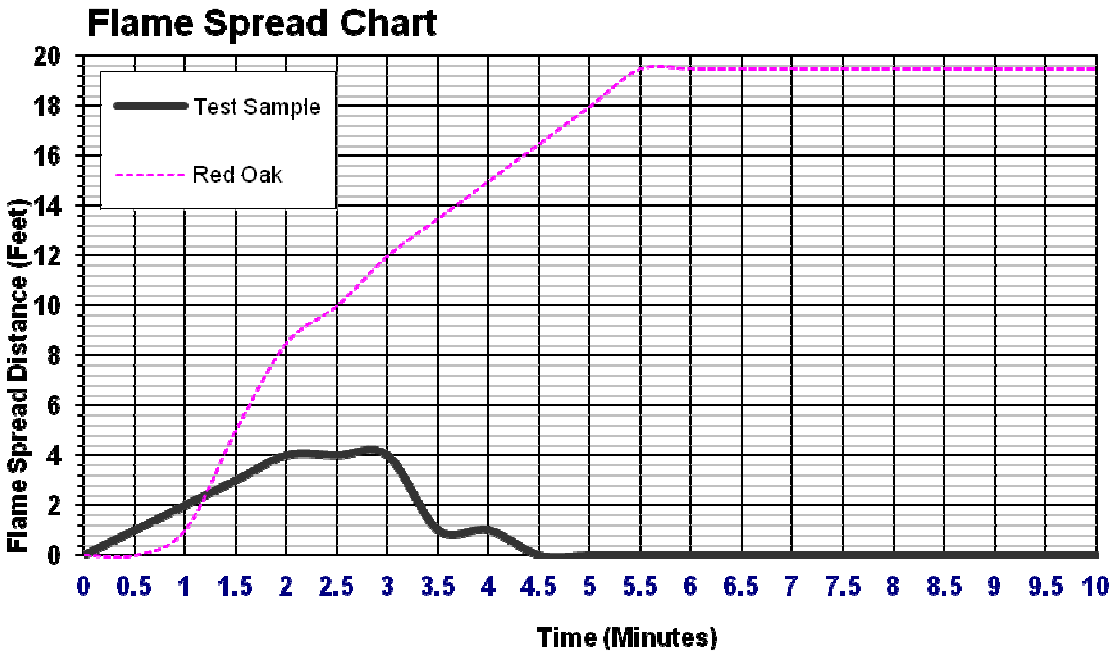

Figure 1 Flame Spread Chart

To be continued….

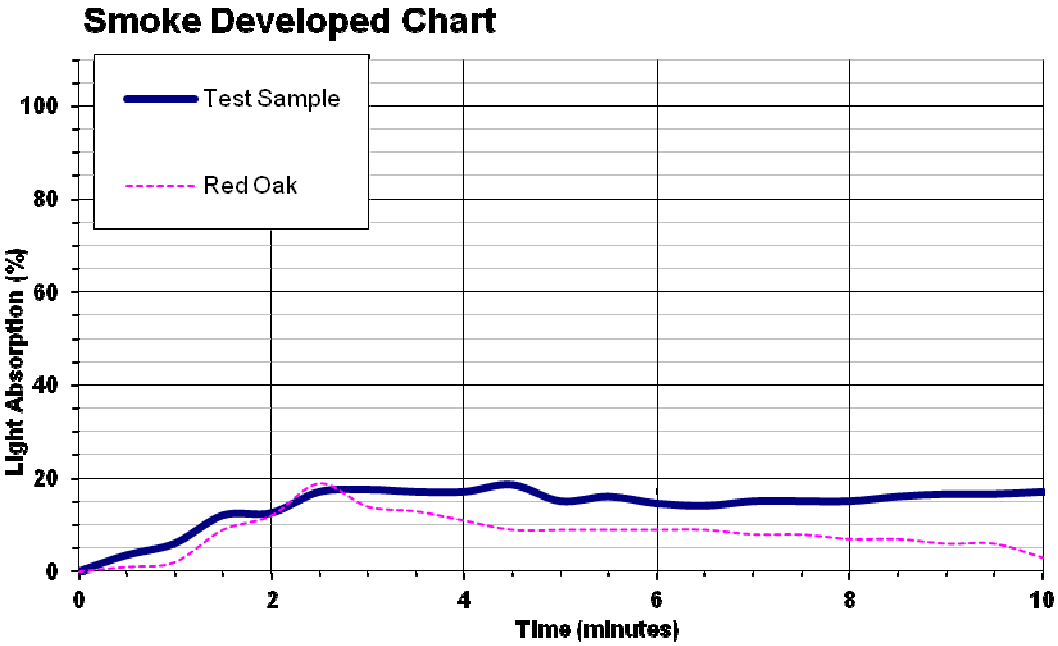

Figure 2 Smoke Developed Chart

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.

The specimen was supplied by the sponsor and SGS-CSTC ANJI Branch was not involved in any selection or sampling procedure.

***** This test was carried out by SGS A.J. Textile Laboratory.**

*** End of Report ***

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