

May 26, 2016

SGS

Test Report

NO. AJHL1605004556FB

Date: MAY.26, 2016

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

**Sample Description:** THE OXFORD WHICH IS LENGTH 2.5M, WIDTH 1.6M COATED WITH PU

**Color:** WHITE

**Density:** LONGITUDE 19, LATITUDE 14

**Thickness:** 0.35MM

**Composition:** 100% POLYESTER

**Test Requested:**

To determine the flammability (building materials class B1) in accordance with DIN 4102-1 (May 1998) Fire behaviour of building materials and elements Part 1: Classification of building materials, Requirements and testing

**Test Results:** -- See attached sheet --

**Classification:** The tested sample meets class B1 building materials requirements of DIN 4102-1 (May 1998).

**Test Period:**

Sample Receiving Date : MAY.10, 2016

Test Performing Date : MAY.10, 2016 TO MAY.25, 2016

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



Allen Zou  
Technical Manager



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

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AJHL 005455

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### I. Test conducted

This test was conducted as per DIN 4102-15:1990 DIN 4102-16:1998 and DIN 4102-1:1998 Clause 6.2, and Classification in according to DIN 4102-1 (May 1998) Clause 6.1-Class B1 materials.

### II. Sample details

|                             |  |
|-----------------------------|--|
| General description / Color | The Oxford Which Is Length 2.5m, Width 1.6m Coated With PU / White |
| Density                     | About 273 g/m <sup>2</sup>   |
| Size of sample              | 1000mm×190mm & 190mm×90mm  |

### Conditioning

Prior to testing, the sample was conditioned at least 14 days to constant mass at a temperature of 23 ± 2 °C, and a relative humidity of 50 ± 6 %.

### III. Test results

#### 1) "Brandschacht" Test according to DIN 4102-15 & 16

Exposed surface: The front face

| Results of "Brandschacht" Test (part 1) |   |                     |      |   |   |
|---|---|---------------------|------|---|---|
| Line No.                                | Unit  | Test assemblies No. |      |   |   |
|   |   | A                   | B    | C | D |
| 1                                       | Specimen fixings according to DIN 4102 part 15, table               | -                   |      |   |   |
| 2                                       | Max. flame height above lower sample edge;                          | cm                  | 30   |   |   |
| 3                                       | Time <sup>1)</sup>  | min:s               | 0:15 |   |   |
| 4                                       | <u>Melting/burning through</u><br>Time <sup>1)</sup>                | min:s               | 0:08 |   |   |
| 5                                       | <u>Back of specimen</u><br>Flaming/glowing, Time <sup>1)</sup>      | min:s               | 0:09 |   |   |
| 6                                       | Discolouring, Time <sup>1)</sup>                                    | min:s               | 0:07 |   |   |
| 7                                       | <u>Burning droplets</u><br>Begin <sup>1)</sup>                      | min:s               | 0:11 |   |   |
| 8                                       | <u>Amount</u><br>Specimen material falling off in separate droplets | ✓                   |      |   |   |
| 9                                       | Specimen material falling off continuously                          |                     |      |   |   |

To be continued...



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**AJHL 005456**

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## Results of "Brandschacht" Test (part 2)

| Line No. | Unit  | Test assemblies No. |   |   |   |
|----------|---|---------------------|---|---|---|
|          |   | A                   | B | C | D |
|          | <u>Burning parts</u>  | NO                  |   |   |   |
| 10       | Begin <sup>1)</sup> min:s                                     | /                   |   |   |   |
| 11       | Parts of sample falling off separately                        | /                   |   |   |   |
| 12       | Parts of sample falling off continuously                      | /                   |   |   |   |
| 13       | Duration of continued combustion on mesh base (max.) min:s    | NO                  |   |   |   |
|          | <u>Burner flame impairment by dripping/falling material</u>   | NO                  |   |   |   |
| 14       | Time <sup>1)</sup> min:s                                      | /                   |   |   |   |
|          | <u>Premature ending of test</u>                               | /                   |   |   |   |
| 15       | End of burning at specimen <sup>1)</sup> min:s                | /                   |   |   |   |
| 16       | Time when test terminated (if applicable) <sup>1)</sup> min:s | /                   |   |   |   |
|          | <u>Burning after end of test</u>                              | NO                  |   |   |   |
| 17       | Duration min:s  | /                   |   |   |   |
| 18       | Number of specimens   | /                   |   |   |   |
| 19       | Front of specimen   | /                   |   |   |   |
| 20       | Back of specimen  | /                   |   |   |   |
| 21       | Height of flame cm  | /                   |   |   |   |
|          | <u>Glowing after end of test</u>                              | NO                  |   |   |   |
| 22       | Duration min:s  | /                   |   |   |   |
| 23       | Number of specimens   | /                   |   |   |   |
| 24       | Front of specimen   | /                   |   |   |   |
| 25       | Back of specimen  | /                   |   |   |   |
| 26       | Top half of specimen  | /                   |   |   |   |
| 27       | Bottom half of specimen                                       | /                   |   |   |   |

To be continued...



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| Results of "Brandschacht" Test (part 3) |                               |       |                     |    |   |  |   |  |   |  |
|---|-------------------------------|-------|---------------------|----|---|--|---|--|---|--|
| Line No.                                |                               | Unit  | Test assemblies No. |    |   |  |   |  |   |  |
|   |                               |       | A                   |    | B |  | C |  | D |  |
|   | <u>Residual length</u>        |       |                     |    |   |  |   |  |   |  |
| 28                                      | Single results                | cm    | 58                  | 52 |   |  |   |  |   |  |
|   |                               |       | 55                  | 50 |   |  |   |  |   |  |
| 29                                      | Average of the single results | cm    | 53.8                |    |   |  |   |  |   |  |
|   | <u>Smoke temperature</u>      |       |                     |    |   |  |   |  |   |  |
| 30                                      | Max. of average               | °C    | 165.7               |    |   |  |   |  |   |  |
| 31                                      | Time <sup>1)</sup>            | min:s | 08:05               |    |   |  |   |  |   |  |

Note: <sup>1)</sup> time from start of testing

\*Reduction in number of test (DIN 4102 Part 16, clause 5.2)

Class B1 materials:

If the residual length measured after the first test is 45cm or greater, further tests are not required.

### 2) Normal Flammability Test according to DIN 4102-1 Clause 6.2

Flame application: [ ☒ ] bottom edge ignition,

| Specimen No.                                  | 1      | 2  | 3  | 4  | 5  |
|---|--------|----|----|----|----|
| Reaching the measuring mark within 20 seconds | No     | No | No | No | No |
| Self extinguishing of the flame (s)           | 15     | 15 | 15 | 15 | 15 |
| Max. flame height (cm)                        | 4      | 5  | 5  | 4  | 4  |
| End of afterflaming (s)                       | 15     | 15 | 15 | 15 | 15 |
| End of afterglowing (s)                       | 15     | 15 | 15 | 15 | 15 |
| Molten dripping                               | No     | No | No | No | No |
| Smoke developments (visual impression)        | Slight |    |    |    |    |

All timings are from start of testing.

To be continued...



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### IV. DIN 4102-1:1998 Criteria for classification

- 1) All materials, except flooring, may be classed as **B1** materials if they meet the following requirements a) and b):
  - a) The test using the 'Brandschacht' apparatus described in DIN 4102-15 (cf. subclause 6.1.3.1) shall be deemed passed if
    - The mean value for the residual length (portion of specimen that has not burned or charred; cf. subclause 9.1 of DIN 4102-16) of each specimen is at least 15 cm and no individual values are lower than 0 cm,
    - The mean effluent temperature does not exceed 200 °C in any test,
    - The requirement for the residual length of each specimen is met even where there is afterflame, afterglow, or smouldering.
  - b) Pass DIN 4102-1: 1998 sub-clause 6.2.3 Ignitability Test if
 

For each specimen, flaming doesn't reach the gage mark within 20s after flame application.
- 2) Materials may be classed as **B2** materials if they pass the ignitability test specified in DIN 4102-1: 1998 subclause 6.2.5.
 

For each specimen, flaming doesn't reach the gage mark (150mm marks) within 20s after flame application.
- 3) Combustible materials which cannot be classed as B1 or B2 materials shall be classed as **B3** materials.

### STATEMENTS:

This test report does not replace any mandatory certification of the product that may be required.

The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire and smoke hazard of the product in use.

### Photo Appendix:



SGS authenticate the photo on original report only

### \*\*\*End of Report\*\*\*

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