

**Test Report** No. AJD201300452 Date: FEB.27, 2013 Page 1 of 6

### JENSEN VENTILATION AB

SE-21124 MALMOE, SWEDEN

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

Sample Description: PVC FABRIC

SGS Ref No.: 11439537

**Product specification:** 650GSM VENTILATION

Product or Lot No.: 651FR

### **Test Requested:**

EN 13501-1:2007+A1:2009 Fire classification of construction products and building elements—Part 1: Classification using data from reaction to fire tests, class B.

Test Results: -- See attached sheet --

### **Test Period:**

Sample Receiving Date : JAN.23, 2013

Test Performing Date : JAN.23, 2013 TO FEB.27, 2013

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

Allen Zou

**Technical Supervisor** 

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### I. Test conducted

This test is conducted as per EN 13501-1:2007+A1:2009 Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests. And the test methods as following:

- 1. EN 13823:2010 Reaction to fire tests for building products Building products excluding floorings exposed to the thermal attack by a single burning item.
- EN ISO 11925-2:2010 Reaction to fire tests Ignitability of building products subjected to direct impingement of flame — Part 2: Single-flame source test.

## II. Details of classified product

### a) Nature and end use application

The product "PVC FABRIC" is defined as a decorative sheet. Its classification is valid for the following end use application:

"VENTILATION"

### b) Description

The details of the product given above have been prepared from information provided by the sponsor of the test.

Color	Yellow
Mass per unit area	630g/m <sup>2</sup>

#### Mounting and fixing:

The test specimens are fixed in the trolley, champed at the top and the bottom, the test specimens are free standing at a distance of 90mm from the backing board. No joint in the long wing of the specimen.

### III. Test results

Test method	Parameter	Number of tests	Results
EN 13823	FIGRA (W/s)		3.1
	LFS < edge of specimen		Yes
	THR <sub>600s</sub> (MJ)	3	0.17
	SMOGRA $(m^2/s^2)$	S	25.2
	TSP <sub>600s</sub> (m <sup>2</sup> )		31.1
	Flaming particles or droplets		No

To be continued...

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Test method	Parameter	Specimen number	Results
EN ISO 11925-2 Exposure = 30 s	<i>F</i> s ≤ 150 mm	12	Yes
	Ignition of the filter paper	12	No

## IV. Classification and direct field of application

This classification has been carried out in accordance with EN 13501-1:2007+A1:2009.

### a) Classification

The product, "PVC FABRIC", classification is as following,

Fire behaviour		Smoke production			Flaming droplets	
В	_	S	1	,	d	0

Reaction to fire classification: B-s1, d0

Remark: The classes with their corresponding fire performance are given in annex A.

## b) Field of application

This classification for the submitted sample is valid for the following end use condition:

- ---With mechanical fixing
- ---No joint

This classification is valid for the following product parameters:

--- Characteristics are described in § II b of this test reports.

**Statement:** 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 hazard of the product in use.

### Warning:

This classification report does not represent type approval or certification of the product.

The test laboratory has, therefore, play no part in sampling the product for the test, although it holds appropriate references to the manufacturer's factory production control that is aimed to be relevant to the samples tested and that will provide for their traceability.

To be continued...

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#### Annex A

Classes of reaction to fire performance for construction products excluding floorings and linear pipe thermal

insulation products

Ilisulatio	nsulation products						
Class	Test method(s)		Classification criteria	Additional classification			
A1	EN ISO 1182 <sup>a</sup> and		△T≤30°C, and △m≤50%, and t <sub>f</sub> =0(i.e. no sustained flaming)	-			
	EN ISO 1716		PCS≤2.0MJ/kg <sup>a</sup> and PCS≤2.0MJ/kg <sup>b c</sup> and PCS≤1.4MJ/m <sup>2</sup> d and PCS≤2.0MJ/kg <sup>e</sup>	-			
A2	EN ISO 1182 <sup>a</sup> or		<i>∆ T</i> ≤50 °C , and <i>∆ m</i> ≤50%, and t <sub>f</sub> ≤20 s	-			
	EN ISO 1716	and	PCS≤3.0MJ/kg a       and         PCS≤4.0MJ/m² b       and         PCS≤4.0MJ/m² d       and         PCS≤3.0MJ/kg e       and	-			
	EN 13823		FIGRA≤120W/s and LFS <edge and<br="" of="" specimen="">THR<sub>600s</sub>≤7.5MJ</edge>	Smoke production <sup>f</sup> and Flaming droplets/particles <sup>g</sup>			
В	EN 13823 and		FIGRA≤120W/s and LFS <edge and<br="" of="" specimen="">THR<sub>600s</sub>≤7.5MJ</edge>	Smoke production <sup>f</sup> and  Flaming droplets/particles <sup>g</sup>			
	EN ISO 11925-2 i Exposure =30s		within 60s <i>F</i> s≤150mm	Training droplets/particles			
С	EN 13823	and	FIGRA≤250W/s and LFS <edge and<br="" of="" specimen="">THR<sub>600s</sub>≤15MJ</edge>	Smoke production f and			
	EN ISO 11925-2 i Exposure=30s		Fs≤150mm within 60 s	Flaming droplets/particles <sup>9</sup>			
D	EN 13823	and	FIGRA≤750W/s	Smoke production <sup>f</sup> and			
	EN ISO 11925-2 i Exposure=30s		Fs≤150mm within 60 s	Flaming droplets/particles <sup>9</sup>			
E	EN ISO 11925-2 i Exposure =15s		Fs≤150mm within 20 s	flaming droplets/particles h			

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No performance determined

<sup>a</sup> For homogeneous products and substantial components of non-homogeneous products.

<sup>b</sup> For any external non-substantial component of non-homogeneous products.

<sup>c</sup> Alternatively, any external non-substantial component having a PCS  $\leq$  2,0 MJ/m<sup>2</sup>, provided that the product satisfies the following criteria of EN 13823: FIGRA  $\leq$  20 W/s, and LFS < edge of specimen, and THR<sub>600s</sub>  $\leq$  4,0 MJ, and s1, and d0.

<sup>d</sup> For any internal non-substantial component of non-homogeneous products.

<sup>e</sup> For the product as a whole.

In the last phase of the development of the test procedure, modifications of the smoke measurement system have been introduced, the effect of which needs further investigation. This may result in a modification of the limit values and/or parameters for the evaluation of the smoke production.

 $s1 = SMOGRA \le 30m^2/s^2$  and  $TSP_{600s} \le 50m^2$ ;  $s2 = SMOGRA \le 180m^2/s^2$  and  $TSP_{600s} \le 200m^2$ ;  $s3 = not \, s1$  or s2

<sup>g</sup> d0 = No flaming droplets/ particles in EN 13823 within 600 s;

d1 = no flaming droplets/ particles persisting longer than 10 s in EN 13823 within 600 s;

d2 = not d0 or d1.

Ignition of the paper in EN ISO 11925-2 results in a d2 classification.

h Pass = no ignition of the paper (no classification);

Fail = ignition of the paper (d2 classification).

Under conditions of surface flame attack and, if appropriate to the end-use application of the product, edge flame attack.

To be continued...

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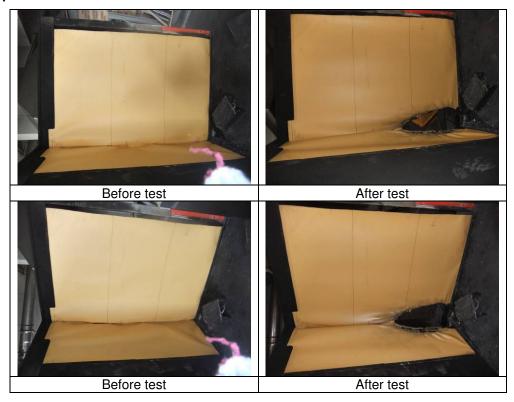


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# **Photo Appendix:**



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

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