Test Report No. 719175807-MEC10/1-YWA
dated 11 Jun 2010

PSB Singapore

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SUBJECT:

Large scale surface spread of flame test on "EchoPanel® 27" 100% PET (60% Re-cycled) Non-woven material submitted by Woven Image on 30 Apr 2010.

TESTED FOR:

Woven Image
37-39 Chard Road
Brookvale
Sydney, NSW 2100
Australia

Attn: Ms Amy Saunders

DATE OF TEST:

26 May 2010

PURPOSE OF TEST:

To determine the tendency of the surface of a material or a combination of materials to support the spread of flame across its surface and to classify the surface according to the test given in British Standard 476 : Part 7 : 1997.
The test was conducted at TÜV SÜD PSB fire test laboratory located at No. 10 Tuas Avenue 10, Singapore 639134.

TÜV SÜD PSB

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LA-2007-0382-B
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Laboratory:
TÜV SÜD PSB Pte. Ltd.
No.1 Science Park Drive
Singapore 118221

Phone : +65-6885 1333
Fax : +65-6776 8670
E-mail: testing@tuv-sud-psb.sg
www.tuv-sud-psb.sg
Co. Reg : 199002667R

Regional Head Office:
TÜV SÜD Asia Pacific Pte. Ltd.
3 Science Park Drive, #04-01/05
The Franklin, Singapore 118223

DESCRIPTION OF SPECIMENS:

Nine pieces of specimen, said to be "EchoPanel® 27" (7mm thick x 1400gsm) 100% PET (60% Re-cycled) Non-woven material, each of nominal size 885mm x 270mm were submitted. The specimens were prepared by adhering onto non-combustibility boards.

TEST PROCEDURE:

Prior to test, the specimens were prepared and conditioned in accordance with paragraphs 5.3 to 5.6 of the standard and secured to a specimen holder as described in paragraph 6.3.

Six specimens, backed with calcium silicate board, were tested with the non-woven face exposed to the specified thermal radiation from the apparatus described in paragraph 6.1 of the standard. The intensity of the radiated heat incident on the specimen varies with distance from the hotter end, so that when the specified calibration panel is mounted in the place to be occupied by the specimen, the irradiance of the radiometer is as given in Table 1. The test was terminated when the flame front reached the 825mm reference line, or after 10 minutes has elapsed, whichever is the shorter.

Table 1 : Irradiance Along Horizontal Reference Line on the Calibration Board

Distance along reference line from inside edge of specimen holder	Irradiance kW/m^2		
mm	specified	min.	max.
75	32.5	32.0	33.0
225	21.0	20.5	21.5
375	14.5	14.0	15.0
525	10.0	9.5	10.5
675	7.0	6.5	7.5
825	5.0	4.5	5.5

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RESULTS OF TEST:

Specimen No.	1	2	3	4	5	6
Spread of flame at first 1½ minutes (mm)	0	0	0	0	0	0
Distance (mm)	Time of spread of flame to indicated distance (minutes • seconds)					
Start of flaming	2.24	7.17	8.52	8.01	3.10	7.07
75	2.37	7.25	8.56	8.10	3.25	7.18
165	3.03	7.51	9.04	8.40	3.54	7.48
190	3.16	8.20	9.19	9.02	4.05	8.17
215	3.40	-	9.45	9.32	4.31	8.33
240	4.06		-	-	5.01	-
265	4.26				-	
290	5.14					
375	-					
455						
500						
525						
600						
675						
710						
750						
785						
825						
865						
Time of maximum spread of flame (minutes • seconds)	6.07	8.26	9.49	9.38	5.10	8.40
Distance of maximum spread of flame (mm)	290-375	190-215	215-240	215-240	240-265	215-240
Comments	None					

Classification of Surface Spread of Flame

Classification	Spread of flame at 1.5 min.		Final spread of flame	
	Limit (mm)	Limit for one specimen in sample (mm)	Limit (mm)	Limit for one specimen in sample (mm)
Class 1	165	165 + 25	165	165 + 25
Class 2	215	215 + 25	455	455 + 45
Class 3	265	265 + 25	710	710 + 75
Class 4	Exceeding the limits for class 3			

CONCLUSION:

In accordance with the class definitions specified in the Standard, the test results show that the sample tested has a Class Two Surface Spread of Flame.

REMARKS:

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

Leong Gene-Jhou
Associate Engineer

Chan Lung Toa
Product Manager
(Fire Safety & Security Products)
Mechanical Centre

PSB Singapore

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March 2010