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**Date**  
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## TEST REPORT 13-1014

Translation

### Samples received :

Needlefelt carpet with user layer of 100% polypropylene with fire-resistant SBR latex impregnation.  
Commercial reference: **CONCORD**, Color: chestnut  
Production date: 6/11/2013, OF: 1317891, mother bobbin 130185144 daughter bobbin 130189360  
Received on 3/12/2013

### Aim of the test :

Determination of fire behaviour

### Test conditions :

Standard:	<b>ISO 11925-2 (2002)*</b>
Method:	The use surface of a vertically put specimen has been placed together with an underlay on an Eflex plate ( <b>loose laid</b> ), is ignited by a propane gas flame. Under condition of surface flame attack with 15 s exposure time, there shall be no flame spread in excess of 150 mm vertically from the point of the test flame within 20 s from the time application. If the boundary line is not reached within 20 s, the sample meets the requirements for the class E <sub>fl</sub> .
Number of tests:	3 lengthwise and 3 crosswise
Measurement uncertainty:	The relative reproducibility for 3 repetitions is 27.2% for the flux.
Conditioning samples:	23 ± 2 °C and 50 ± 5 % R.H.

## Fire Behaviour

Standard:

**EN ISO 9239-1 (2010)\***

Method:

Before the test the samples are **not cleaned** with a spray-extraction machine.

A floorcovering is **put on** (loose laid) a fibre cement board (Eflex). During the test, the specimen is irradiated by a gas radiator at an angle of 30°. A small flame is used to ignite the specimen. The specimen is ignited during 10 minutes. In case of inflammable specimens, the test lasts until the flame is extinguished, but 30 minutes at the most. The criterion is the burned length, from which the critical radiant flux is deduced using a calibration curve.

Number of tests:

4

Measurement

The relative reproducibility for 3 repetitions is 15.6% for the flux, 84.5% for the smoke development.

uncertainty:

Conditioning samples:  $23 \pm 2$  °C and  $50 \pm 5$  % R.H.

The tests were performed in week 51/2013

## **OBTAINED RESULTS**

### **ISO 11925-2 (2002)**

- **Lengthwise**

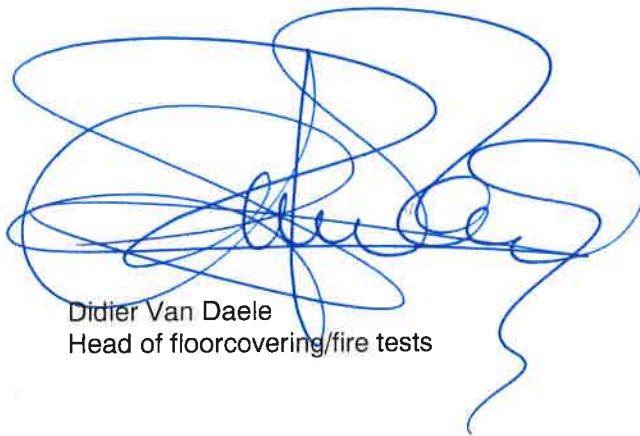
<b>Sample</b>	<b>Afterburning time (s)</b>	<b>After glowing time (s)</b>	<b>Boundary line reached within 20 s</b>
1	24	-	No
2	30	-	No
3	17	-	No

- **Crosswise**


<b>Sample</b>	<b>Afterburning time (s)</b>	<b>After glowing time (s)</b>	<b>Boundary line reached within 20 s</b>
1	17	-	No
2	16	-	No
3	15	-	No

**EN ISO 9239-1 (2010)\***

Specimen number	1 Length	2 Width	3 Width	4 Width	Average Specimens 2,3,4
Flame spread after 10 min (mm)	0	90	0	70	
Flame spread after 20 min (mm)	0	90	0	70	
Flame spread after 30 min (mm)	0	90	0	70	
Flame spread at extinction (mm)	0	90	0	70	
Flame time	12min 0s	12min 0s	12min 0s	12min 0s	
Critical heat flux CHF at extinction (kW/m <sup>2</sup> )	10.9	11.0	10.9	11.1	≥11
Total smoke production at end of test (%.min)	10	18	9	15	13



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Prof. Dr. Paul KIEKENS, dr. h. c.  
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## ENCLOSURE TO REPORT 13-1014

**Classification according to EN 13501 –1 (2007 + A1: 2009)\***

Classification	EN ISO 11925-2 (ignition time = 15 s)	EN ISO 9239-1 (test period = 30 min)	CLASS
B <sub>fl</sub>	F <sub>s</sub> ≤ 150 mm in 20 s	Critical flux ≥ 8.0 kW/m <sup>2</sup>	X
C <sub>fl</sub>	F <sub>s</sub> ≤ 150 mm in 20 s	Critical flux ≥ 4.5 kW/m <sup>2</sup>	
D <sub>fl</sub>	F <sub>s</sub> ≤ 150 mm in 20 s	Critical flux ≥ 3.0 kW/m <sup>2</sup>	
E <sub>fl</sub>	F <sub>s</sub> ≤ 150 mm in 20 s	No demand	
F <sub>fl</sub>	No demand	No demand	

**Additional classification smoke development according to EN 13501-1 (2007 + A1:2009)\***

		CLASS
Smoke development ≤ 750%.min	s1	X
Smoke development > 750%.min	s2	