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## TEST REPORT 08-181

### Samples received :

PULASTIC ZS (5+2)

#### *Information given by customer:*

Polyurethane/Rubber floorcovering. Total thickness approx. 7 mm. Total surface weight approx. 6.8 kgs/sq. m.

Build up :

- Wear coat, polyurethane based with a surface weight of approx. 3.5 kgs/sq. m and a thickness of approx. 2 mm.

- Shock pad consisting of a polyurethane bonded recycled-rubber with a surface weight of approx. 3.3 kgs/sq.m and a thickness of approx. 5 mm.

Floor covering system has been glued on a fiber cement base 5-6 mm thickness.

Received on 5/03/08

**Aim of the test** : Determination of fire behaviour

### Test conditions :

Standard: **EN ISO 9239-1 (2002)\***

Method: Before the test the samples are not cleaned with a spray-extraction machine. 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: 3

Conditioning 23 ± 2 °C and 50 ± 5 % R.H.

samples:

The tests were performed in week 11/2008

**Classification according to EN 13501-1 (2002)°**

Classification	EN ISO 11925-2 (ignition time = 15 s)	EN ISO 9239-1 (test period = 30 min)
B <sub>fl</sub>	F <sub>s</sub> ≤ 150 mm in 20 s	Critical flux ≥ 8.0 kW/m <sup>2</sup>
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 (2002)°**

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

**OBTAINED RESULTS**

a) Critical Flux :

Sample	Burned length (mm)		
	after 10 min	after 20 min	after 30 min
1	100	170	195
2	200	205	205
3	110	190	190
<b>average</b>	<b>137</b>	<b>188</b>	<b>197</b>

Sample	Burned length maximum (mm)	Extinction (s)	Critical Flux (kW/m <sup>2</sup> )
1	195	> 1800	9.5
2	205	> 1800	9.3
3	190	> 1800	9.6
<b>average</b>	<b>197</b>	-	<b>9.5</b>

b) Smoke development:

Sample	Smoke development (%min)			Smoke development (%min)
	after 10 min	after 20 min	after 30 min	Maximum
1	298	830	1213	1213
2	366	923	1064	1064
3	305	967	1371	1371
<b>average</b>	<b>323</b>	<b>907</b>	<b>1216</b>	<b>1216</b>

**CLASSIFICATION**

Since the radiation intensity is **higher** than 8.0 kW/m<sup>2</sup> and the smoke development is higher than 750 %min, the quality **PULASTIC ZS (5+2)** meets the demands of **class B<sub>FL</sub> s2** according to EN 13501-1°

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