

# Tarkett SAS

## TEST LABORATORY

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### REACTION TO FIRE TEST REPORT Fire test according to EN ISO 9239-1

**05F1296 e**  
*(cancels and replaces the report Nr 05F1265 e)*

*This test report attests only characteristics of the sample submitted for testing and does not prejudge characteristics of similar products.*

<b>Reference :</b>	<b>ACCZENT WOOD</b>
<b>Request by :</b>	<b>TARKETT AUSTRALIA Pty Ltd 4, Judd Street, South Perth WA 6151 PERTH</b>

*The COFRAC is signatory of the multilateral agreement of EA (European co-operation for Accreditation) and of ILAC (International Laboratory Accreditation Cooperation) of recognition of the equivalence of the tests reports.*

*The reproduction of this test report is only authorised in the shape of an integral photographic facsimile. It comprises 5 pages.*

**1 - Product name :** ACCZENT WOOD

**2 - Manufacturer :** TARKETT SAS  
2 Avenue François Sommer  
BP 40333  
F-08203 SEDAN Cedex

**3- Description of the sample under test :**

*Resilient heterogeneous compact floor covering.*

Mass per unit area	: 3060 g/m <sup>2</sup>	Thickness measured	: 2.0 mm
Code product	: <b>SACW</b>	Manufacturer reference	: CW21735 131
Date of reception	: 23/12/04	Date of the test	: 12/01/05
		Order nr	: 4521

**4- Testing method :**

**Tests carried out according the following standard :**

*NF EN ISO 9239-1 - March 2002 :*

*Reaction to fire tests for flooring – Part 1 : determination of the burning behaviour using a radiant heat source.*

**Test Objectives:**

Determine the critical heat flux (C.H.F.) and the smoke generation.

**5- Particular conditions :**

**Size of Specimen(s):** 3 specimens 230 mm x 1050 mm x usual thickness

**Assembly and conditioning :** *The specimen were glued onto the non-combustible backing boards and conditioned during 14 days with 23°C ± 2°C and 50 % ± 10 % HR. Because of the principle of manufacture the product is regarded as isotropic and does not require an examination in the two directions (length – width).*

**6 - Test Results :**

6-1 - Statement of the face of flame according to time

Length (cm)	Time (s)		
	Specimen 1	Specimen 2	Specimen 3
5	126	128	125
10	157	150	159
15	188	181	178
20	236	220	210
25	-	286	-
30	-	-	-

## 6-2 - propagation of the flame - development of smoke

<i>Specimen</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>Average</i>
Spread of flame (cm)	24	26	25	25
Time of flame out (min:s)	11:59	11:59	11:59	11:59
Critical radiant Flux in kW/m <sup>2</sup>	8.4	8.2	8.2	8.3
Smoke production (%.min)	333	332	357	341

### Final values

<b>Critical Heat Flux (C.H.F.)</b>	:	<b>8.3 kW/m<sup>2</sup></b>
<b>Smoke production</b>	:	<b>341 %.min</b>

## **8 – Remarks and comments**

8-1 The test results apply only to the building product described in section 3 to the use as horizontal floor covering - on substrate of the euro classes A1 or A2 according to the EN 13501-1 standard with a density of minimum 1350 kg/m<sup>3</sup>. The fire behaviour with other materials is to be proven therefore separately.

8-2 The test results relate to only the behaviour of the specimens of a product under the particular conditions of the test. They are not intended to be the only criterion of evaluation of the fire hazard presented by the product of use.

8-3 Uncertainties: during the development of this standard, inter-laboratories tests were carried out on 10 floor coverings by 13 laboratories, uncertainties are different according to products and are presented in annex (table 1).

8-4 Extract of the European standard of classification figures in annex (table 2).

Sedan, 04 November 2005

Technician  
Tony LOCATELLI

For signature  
Judicăel CHAMPION



Responsible of laboratory  
J. HAJEWSKI



## ANNEX

**Table 1 : Result of the inter-laboratories tests and internal repeatability**

Flooring	Test results of the C.H.F. 30 - average heat	repeatability		reproducibility	
		E-T S <sub>r</sub>	S <sub>r</sub> /m (%)	E-T S <sub>R</sub>	S <sub>R</sub> /m (%)
Agglomerate. not FR	4.4	0.1	3.4	0.6	12.6
Parquet floor of beech	7.8	1.6	19.9	1.9	24.7
PVC, continuous vinyl	10.7	0.2	2.3	0.6	5.6
Rubber	6.4	0.8	13.0	1.5	23.9
Carpet of polyamide (textile support)	3.8	0.4	10.5	0.8	21.3
Carpet of polyamide (textile support fireproofs)	7.6	1.1	14.8	1.8	23.6
Carpet of polyamide (support latex)	3.7	0.8	20.5	1.0	27.1
Carpet of polypropylene	2.7	0.2	6.5	0.4	13.4
Carpet of polypropylene (needlefelt)	5.2	1.1	21.4	2.4	47.2
Carpet of wool / polyamide (80/20)	7.8	0.8	10.0	1.5	18.9

To complete the repeatability of the European inter-laboratories test, we have measured the repeatability of the linoleum and the PVC (vinyl on foam backing and compact resilient floor covering).

Flooring	C.H.F. in kW/m <sup>2</sup>	repeatability	
		E-T S <sub>r</sub>	S <sub>r</sub> /m (%)
Linoleum	6.5	0.3	4.6
PVC - Vinyl on foam backing	7.7	0.8	10.3
PVC - Compact resilient floor covering	9.2	0.7	7.6

**Table 2 : Performance classes of fire reaction for the floor coverings**

Class	Testing methods	Criteria of classification	Additional classifications
B <sub>fl</sub>	EN ISO 9239-1 <sup>1)</sup>	Critical illumination <sup>2)</sup> ≥ 8.0 kW/m <sup>2</sup>	Production of smoke <sup>3)</sup>
	EN ISO 11925-2 Exposure : 15s	F <sub>s</sub> ≤ 150 mm in 20 s	
C <sub>fl</sub>	EN ISO 9239-1 <sup>1)</sup>	Critical illumination <sup>2)</sup> ≥ 4.5 kW/m <sup>2</sup>	Production of smoke <sup>3)</sup>
	EN ISO 11925-2 Exposure : 15s	F <sub>s</sub> ≤ 150 mm in 20 s	
D <sub>fl</sub>	EN ISO 9239-1 <sup>1)</sup>	Critical illumination <sup>2)</sup> ≥ 3.0 kW/m <sup>2</sup>	Production of smoke <sup>3)</sup>
	EN ISO 11925-2 Exposure : 15s	F <sub>s</sub> ≤ 150 mm in 20 s	
E <sub>fl</sub>	EN ISO 11925-2 Exposure : 15s	F <sub>s</sub> ≤ 150 mm in 20 s	
F <sub>fl</sub>	no determined performance		

<sup>1)</sup> Duration of test = 30 minutes

<sup>2)</sup> Critical heat flux (C.H.F.) is defined as being heat flux where the flame dies out or heat illumination after a test period of 30 min, according to the lowest value (i.e. illumination corresponding to the longest extension of propagation of flame)

<sup>3)</sup> s1 = smoke ≤ 750 %.min      s2 = not s1

3 – photographs of the burned specimens

