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**Report number T09.25024.01**

**Sponsor:**

Contractor, manufacturer : Unifloor Under flooring products B.V.  
Product name/family : Product Family 1, see appendix I, page five

**Date**  
17 February 2010

**Project number**  
T09.25024

**Purpose :**

Classification accordance EN 13501:2007.

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Reaction to fire test, according to:

- EN ISO 11925-2:2002 Reaction to fire tests for building products, Part 2:  
Ignitability when subjected to direct impingement of flame (ISO 11925-2:2002).
- EN ISO 9239 reaction to fire tests for floor coverings, Part 1: Determination of the  
burning behaviour using a radiant heat source (ISO 9239-1:2002).

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**Article**  
Product Family 01

**Appendices**  
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**Results:**

On pages two up to and, including four.

TQS applies the Standard Conditions for  
research instructions given to TNO. The  
Standard Conditions will be sent on request



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**Test results: EN-ISO 11925-2:2002 Small burner examination**

Date of test : October-November 2009  
Conditioning time, climate : min. 3 days,  $23 \pm 2$  °C and  $50 \pm 5$  %  
Description of substrate : 6 mm. Fibre cement board,  $1800 \text{ kg/m}^3$ .  
Flame application : Surface.  
Application time : 15 seconds.

**Assessment:**

**FAMILY 1** under flooring products, fulfilled the requirements EN ISO 11925-2<sup>1</sup>  
(Fs  $\leq$  150 mm within 20 s.).

Based on the test results and evaluating the criteria for classification according to clause 8 of the EN-ISO 11925-2:2002 the examined **FAMILY 1** under flooring products proved to be capable of resisting, for a short period, a small flame attack without substantial flame spread.

If assessed according to Table 1 of the European classification standard EN 13501-1:2002 "**Classification standard for building product and building elements**" the examined product will be classified as follows: **Class E<sub>n</sub>**.

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<sup>1</sup> Under conditions of surface flame attack and, if appropriate to the end-use application of the product, edge flame attack.



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**Test results: EN ISO 9239-1:2002. Radiant Panel test.**

Date of testing : October-November 2009  
 Conditioning time, climate : min. 3 days,  $23 \pm 2$  °C and  $50 \pm 5$  %  
 Description of substrate : 6 mm. Fibre cement board,  $1800 \text{ kg/m}^3$ .  
 Sampling procedure : by contractor.  
 Description of cleaning used : none  
 Fixing method : loose laid

Quality	Test specimen, orientation	CRF (kW/m <sup>2</sup> )	Smoke production (%.min)
Heat Pak	longitude	3.47	28
Jumpax	longitude	3.05	139
Jumpax Heavy (HD)	longitude	3.8	53
Parpax	longitude	2.97	239
Struktus Superieur	longitude	2.64	194

Table 1: A list of radiant panel test results (EN-ISO 9239-1) from qualities of the Family of Products 1.

**Classification criteria Class E<sub>FL</sub>:**

- Critical flux (CRF) <  $3.00 \text{ kW.m}^2$ .
- Smoke production, Smoke  $\leq 750 \text{ \%. Min}^{-1}$ .
- Fulfilled the requirements EN ISO 11925-2



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**Conclusion:**

According to EN 13501:2007 the tested samples of the aforementioned **Family 1** meets the requirements of **Class E<sub>FL</sub>**

**Statements:**

The test results only relate to the behaviour of the test specimens of the examined product under the particular conditions of the test in laboratory conditions; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use. The method might not be suitable if the product is exposed to much larger flames or heat radiant sources.

The validity of this report will expire five years after its issue or directly after alterations or modifications of the examined product(combination)(s) and/or the criteria. This report shall not be reproduced, except in full, without the written approval of the testing laboratory.

Project leader:

A handwritten signature in black ink, appearing to be 'J. Brinks', written over a large, light-colored oval shape.

Mr. J. Brinks

Author:

A handwritten signature in black ink, appearing to be 'I. Pierik', written over a large, light-colored oval shape.

Mrs. I. Pierik

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## APPENDIX I: PRODUCT FAMILY 1, description of samples

### Description of sample:

Type of product : underlayment/under flooring

Quality	Total mass	Total thickness
	kg/m <sup>2</sup>	mm
Heat Pak	4.9	7
Jumpax	6.5	10
Jumpax Heavy (HD)	7.4	11
Parpax	9.6	17
Struktus Superieur	5.5	11