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Report number T09.25024.06

Sponsor:

Contractor, manufacturer : Unifloor Underlay Systems B.V.
Product name/family : Product Family 6, see appendix I, page five.

Date

17 February 2010

Project number

T09.25024

Purpose :

Classification accordance EN 13501:2007.

Telefoon cliënt

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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).

Fax cliënt

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Article

Product Family 06

Appendices

1, page 5

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



Date
17 February 2010

Project number
T09.25024

Article
Product Family 06

Page
2 of 5

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

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

Assessment:

FAMILY 6A under flooring, did not fulfill the requirements EN ISO 11925-2¹ ($F_s \leq 150$ 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 6A** under flooring proved to be incapable 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 F_{fl}**.

FAMILY 6B under flooring, did not fulfill the requirements EN ISO 11925-2¹ ($F_s \leq 150$ 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 6B** under flooring proved to be incapable 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_{fl}**.

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



Date
17 February 2010

Project number
T09.25024

Article
Product Family 06

Page
3 of 5

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

Date of testing : October – November 2009
Conditioning time, climate : min. 3 days, 23 ± 2 °C and 50 ± 5 %
Description of substrate : 6 mm. Fibre cement board, 1800 kg/m³.
Sampling procedure : by contractor.
Description of cleaning used : none
Fixing method : loose laid

Quality	Test specimen, orientation	CRF (kW/m ²)	Smoke production (%.min)
Paladin 7mm brown	longitude	1.86	21
Paladin green	longitude	2.09	14
Parmafloor	longitude	1.25	31
Runner	longitude	1.27	46
Softfloor	longitude	1.43	15
Soundeater	longitude	1.00	87
Soundkiller	longitude	1.27	44
Superfloor	longitude	1.46	29
Supertrans	longitude	1.33	42
Thermofelt	longitude	1.43	48
Uniboard 30 mm	longitude	1.54	62

Table 1: A list of radiant panel test results (EN-ISO 9239-1) from qualities of the Family of Products 6A.

Quality	Test specimen, orientation	CRF (kW/m ²)	Smoke production (%.min)
Redupax	longitude	2.42	88

Table 21: A list of radiant panel test results (EN-ISO 9239-1) from qualities of the Family of Products 6B.

Remarks: no flashing, transitory- or sustained flaming,
* specimen extinguished naturally

Classification criteria Class F_{FL}:

- No performance

Classification criteria Class E_{FL}:

- Critical flux (CRF) < 3.00 kW.m².
- Smoke production, Smoke ≤ 750 %. Min⁻¹.
- Fulfilled the requirements EN ISO 11925-2



Date
17 February 2010

Project number
T09.25024

Article
Product Family 06

Page
4 of 5

Conclusion:

According to EN 13501:2007 the tested samples of the aforementioned **Family 6A** meets the requirements of **Class F_{FL}**.

According to EN 13501:2007 the tested samples of the aforementioned **Family 6B** meets the requirements of **Class E_{FL}**.

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.

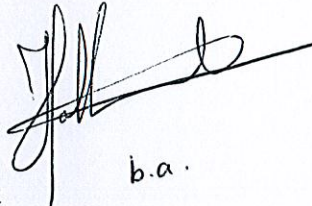
The validity of this report will expire five years after its issue or directly after alterations or modifications of the examined product(combination)(s) and/or the criteria. This report shall not be reproduced, except in full, without the written approval of the testing laboratory.

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b.a.

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Date
17 February 2010

Project number
T09.25024

Article
Product Family 06

Page
5 of 5

APPENDIX I: PRODUCT FAMILY 6, description of samples

Description of sample:

Type of surface : underlayment/underflooring

Product Family 6A

Quality	Total mass	Total thickness
	kg/m ²	mm
Paladin 7mm brown	2.3	7
Paladin green	1.0	4
Parmafloor	3.0	9
Runner	1.7	6
Softfloor	1.5	7
Soundeater	3.8	15
Soundeater	6.8	27
Soundkiller	4.7	15
Superfloor	1.9	7
Supertrans	2.3	7
Thermofelt	2.2	7.5
Uniboard 30 mm	8.9	30

Product Family 6B

Quality	Total mass	Total thickness
	kg/m ²	mm
Redupax	4.6	9