IVC nv Mevr. Evelyne Martin Nijverheidslaan 29 8580 AVELGEM



Your notice of	Your reference	Date
27-03-2014	207 4500829373	18-04-2014

Analysis Report 14.01543.01

Required tests :

EN 13501-1 (2007) + A1 (2009)

Identification number	Information given by the client	Date of receipt
T1405297	ITEC 319	27-03-2014

Kristina De Temmerman

Order responsible

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The results of the analysis cover the received samples. Centexbel is not responsible for the representativeness of the samples. In assessing compliance with the specifications, we did not take into account the uncertainty on the test results.

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Reference: T1405297 - ITEC 319

Information given by the client

Product standard	EN 13501-1 (2007) + A1 (2009)
Floor covering type	Polyvinyl chloride floor coverings with foam layer
EN product standard	EN 651
FR treated	no
Mass	2865 g/m ²
Thickness	3,10 mm

Notified body No: 0493

Reference: T1405297 - ITEC 319

<u>Reaction to fire tests – Ignitability of building products subjected to direct impingement of flame - Single-flame source test</u>

Product standard

EN 13501-1 (2007) + A1 (2009)

Classification of resilient floor coverings in accordance with EN 14041 (2004) § 4.1.4 "The resilient floor coverings listed in Table 3, in the end uses identified in the table, are classified without further testing (CWFT) in the classes shown and do not require testing in respect of these end uses and classes".

Floor covering type ¹	EN product standard	Minimum mass (kg/m²)	Maximum mass (kg/m²)	Minimum overall thickness (mm)	Class ² Floorings
Plain and decorative Linoleum	EN 548	2.3	4.9	2	Efl
Homogeneous and heterogeneous polyvinyl chloride floor coverings	EN 649	2,3	3,9	1,5	E_{fl}
Polyvinyl chloride floor coverings with foam layer	EN 651	1.7	5.4	2	E _{fl}
Polyvinyl chloride floor covering with cork-based backing	EN 652	3.4	3.7	3.2	Efl
Expanded (cushioned) polyvinyl chloride floor coverings	EN 653	1,0	2,8	1,1	Efl
Semi-flexible polyvinyl chloride tiles	EN 654	4.2	5.0	2	Efl
Linoleum on corkment backing	EN 687	2.9	5.3	2.5	Efl
Homogeneous and heterogeneous smooth rubber floor coverings with foam backing	EN 1816	3.4	4.3	4	E_{fl}
Homogeneous and heterogeneous smooth rubber floor coverings	EN 1817	3.0	6.0	1.8	E_{fl}
Homogeneous and heterogeneous relief rubber floor coverings	EN 12199	4.6	6.7	2.5	E _{fl}

Table 3 – Classes of reaction to fire for resilient floor coverings, classified without further testing

¹⁾ Floor covering loose laid over any wood based substrate of at least Class D-s2,d0 or any substrate of at least Class A2-s1,d0.

²⁾ Class as provided for in Table 2 in the Annex to Decision 2000/147/EC.

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Classification

Class E_{fl}

Reference: T1405297 - ITEC 319

<u>Reaction to fire tests for floorings - Determination of the burning behaviour using a</u> <u>radiant heat source</u>

Date of ending the test	17-04-2014
Standard used	EN ISO 9239-1 (2010)
Product standard	EN 13501-1 (2007) + A1 (2009)
Deviation from the standard	-
Conditioning	23°C, relative humidity 50%
	Minimum 14 days or until constant mass is achieved

The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test: they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

Test specimen

Substrate	Fibre cement board - density (1800 ± 200) kg/m ³
Mounting	Stuck down with
	UZIN UZ 57 / Unipro - low emission, solvent-free
	dispersion adhesive – "EC1 very low emission"
Cleaning	Specimens have not been cleaned

	Flame spread distance (cm)			Flame time	Heat flux *
	10 min	20 min	30 min		kW/m ²
Width					
#1	23	23	23	12 min 00 s	8.8
Length					
#1	23	23	23	12 min 00 s	8.8
#2	23	23	23	12 min 00 s	8.8
#3	23	23	23	12 min 00 s	8.8
Average					8.8

Radiant heat flux

* Heat flux at the time of flame extinguishment or after a test duration of 30 minutes.

Fire classification in accordance with EN 13501-1 (2007) + A1 (2009)			
Class	EN ISO 11925-2 or CWFT	EN ISO 9239-1 (test duration = 30 min)	
B_{fl}	E _{fl}	heat flux \geq 8,0 kW/m ²	
$C_{\rm fl}$	E _{fl}	heat flux $\geq 4,5$ kW/m ²	
$D_{\rm fl}$	E _{fl}	heat flux $\geq 3,0$ kW/m ²	

Smoke production: Light attenuation

	Maximum (%)	Total (%.min)
Width		
#1	88	213
Length		
#1	87	204
#2	85	185
#3	87	197
Average		195

Additional classification in accordance with EN 13501-1 (2007) + A1 (2009)		
smoke production \leq 750%.min s1		
smoke production > 750%.min	<u>s2</u>	

Reaction to fire classification : $B_{\rm fl}/\,s1$

glued on a non-combustible substrate*

* End use substrates of classes A1 or A2-s1,d0 (ISO 13238:2010 § 5.2.2)

Limitations

This classification document does not represent type approval or certification of the product.

"The classification assigned to the product in this report is appropriate to a declaration of conformity by the manufacturer within the context of system 3 attestation of conformity and CE marking under the Construction Products Directive.

The manufacturer has made a declaration, which is held on file. This confirms that the products design requires no specific processes, procedures or stages (e.g. no addition of flame-retardants, limitation of organic content, or addition of fillers) that are aimed at enhancing the fire performance in order to obtain the classification achieved. As a consequence the manufacturer has concluded that system 3 attestation is appropriate.

The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested."

Performed under accreditation in the fire lab under the responsibility of Filip Ghekiere