4.1 **Reaction to fire-results**

The test results are shown in Table No.1a) and No.1b)-tests with use of adhesive. The results without use of adhesive were the same .

Tested samples-thickness 2 mm.

Table No.1 a)-initial testing results-reaction to fire (art.4.1). Thickness 3 mm.

Testing method	Characteristic	Value identified						Results	
								Average continual parameter (m)	Parameter of fulfilment
EN ISO 11925-2 exposure-15s	Flame spread: Fs≤150mm	yes	yes	yes	yes	yes	yes	(-)	yes
EN ISO 9239-1	Critical heat flux ($kW.m^{-2}$)	≥11		≥11		≥11		≥11	(-)
	Smoke (%, minute)	136,8		145,0		164,6		148.8	

Table No.1 b)-initial testing results-reaction to fire (art.4.1). Thickness 2 mm.

Testing method	Characteristic	Value identified						Results	
								Average continual parameter (m)	Parameter of fulfilment
EN ISO 11925-2 exposure-15s	Flame spread: Fs≤150mm	yes	yes	yes	yes	yes	yes	(-)	yes
EN ISO 9239-1	Critical heat flux ($kW.m^{-2}$)	11,21		11,05		10,3		10.85	(-)
	Smoke (%, minute)	54,23		56,65		59,62		58,83	

Legend:(-)-not related

4.2 **Formaldehyde emission-results**

The test results are shown in Table No.2.

Tested sample-thickness 2 mm. The test result is applied for thickness 2~20 mm too.

Table No.2-initial testing result-formaldehyde emission (art.4.3)

Testing method	**Characteristic**	**Requirement**	**Value identified**	**Evaluation**
EN717-1	Release of formaldehyde	class E1…≤0,124mg/m^3 E2…>0,124mg/m^3	0,005mg HCHO/M^3	E1

Legend: E1-satisfy

4.3 **Slip resistance-results**

The test results are shown in Table No.3

Tested sample-thickness 3 mm. The test result is applied for thickness 2~20mm too.

Table No.3-initial testing result-slip resistance (art.4.5)

Testing method	Characteristic	Requirement	Value identified	Evaluation
EN 13893	Dynamic cocfficient of friction - μ	Class DS…≥0,30	0,4	S

Legend: S-satisfy

4.4 **Classification of building product and area of direct application**

4.4.1 **Reaction to fire**

The classification has been performed in compliance with the articles 12.6 and 12.9 of the standard EN 13501-1(and art.4.1.4 of the standard EN 14041).

Classification of building product (thickness 3)

Testing method	Characteristic	Requirement	Value identified	Evaluation
EN ISO 11925-2 exposure-15s	Flame spread Fs	class B Fs≤150mm	Flame didn't spread more than 150 mm	S
EN ISO 9239-1	Critical heat flux ($kW.m^{-2}$)	class B ≥8$kW.m^{-2}$	10,08	S
	Smoke (%, minute)	class s ≤750%.minute	54,56	S

Behaviour during burning	Smoke generation
Bn	s1

Classification of the product according to reaction to fire:

On the basis of initial testing results the product shall be declared as class: Bn

Additional classfification according to smoke generation: s1

Modification of floor covering classification according to reaction to fire: Bn-s1

4.4.2 **Area of application**

The present classification applies only for the assessed product with the above specified parameters (see art.1 of this protocol). The classification applies for the following final use of the product:

- underlying layer: the type testing results can be used if the density of practical underlying layer is min.0,75 multiple of density of standard substrate (according to EN 13238, art.5.1)
- method of laving: laying with use of dispersed adhesive or without use of adhesive.

4.4.2 **Formaldehyde emission**

The classification has been performed in compliance with the art.4.3 of the standard EN14041.

On the basis of initial testing result the product shall be declared as formaldehyde class E1.

Table No.3-initial testing result-slip resistance (art.4.5)

Testing method	Characteristic	Requirement	Value identified	Evaluation
EN 13893	Dynamic cocfficient of friction - μ	Class DS···≥0,30	0,4	S

Legend: S-satisfy

4.4 **Classification of building product and area of direct application**

4.4.1 **Reaction to fire**

The classification has been performed in compliance with the articles 12.6 and 12.9 of the standard EN 13501-1(and art.4.1.4 of the standard EN 14041).

Classification of building product (thickness 3)

Testing method	Characteristic	Requirement	Value identified	Evaluation
EN ISO 11925-2 exposure-15s	Flame spread Fs	class B Fs≤150mm	Flame didn't spread more than 150 mm	S
EN ISO 9239-1	Critical heat flux ($kW.m^{-2}$)	class B ≥8$kW.m^{-2}$	10,08	S
	Smoke (%, minute)	class s ≤750%.minute	54,56	S

Behaviour during burning	Smoke generation
Bn	s1

Classification of the product according to reaction to fire:

On the basis of initial testing results the product shall be declared as class: Bn

Additional classfification according to smoke generation: s1

Modification of floor covering classification according to reaction to fire: Bn-s1

4.4.2 **Area of application**

The present classification applies only for the assessed product with the above specified parameters (see art.1 of this protocol). The classification applies for the following final use of the product:

- underlying layer: the type testing results can be used if the density of practical underlying layer is min.0,75 multiple of density of standard substrate (according to EN 13238, art.5.1)
- method of laving: laying with use of dispersed adhesive or without use of adhesive.

4.4.2 **Formaldehyde emission**

The classification has been performed in compliance with the art.4.3 of the standard EN14041.

On the basis of initial testing result the product shall be declared as formaldehyde class E1.