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Außenstelle Erwitte • Auf den Thränen 2 • 59597 Erwitte • Telefon (0 29 43) 8 97-0 • Telefax (0 29 43) 8 97-33 • E-mail: erwitte@mpanrw.de

Report of the classification of the reaction to fire

No. 230009346-2
of 28.04.2014

English version

This report replaces the report dated 17.03.2014 with the same number

Customer: FIXIT-GRUPPE

Badstraße 23
A-6832 Roethis

Order: Classification of reaction to fire in accordance with DIN EN 13501-1

Date of order: 10.02.2014

Designation of the construction product to be classified:

System "FIXIT 222 AEROGEL Hochleistungsdämmputz" [high performance insulating plaster]

This report determines the classification of the above-mentioned construction product in conformity with the method shown in DIN EN 13501-1.

This classification report has 5 pages.

1 Description of the construction product

Composite system FIXIT 222 AEROGEL, consisting of:

Component A	Preparatory mortar: "FIXIT, RÖFIX, HASIT Zement-Vorspritzmörtel" approx. 5 kg/m² dry applied quantity with a thickness of 4 mm (grain size)
Component B	"FIXIT 222 Aerogel Hochleistungsdämmputz" approx. 12 kg/m² dry applied quantity with a thickness of 60 mm
Component C	Plaster base: "FIXIT, RÖFIX, HASIT Silikat-Tiefengrund" approx. 32 g/m² dry applied quantity (penetrating into the substrate)
Component D	Reinforcement layer: "FIXIT 223 Spezial Einbettmörtel" approx. 4 kg/m² dry applied quantity with a thickness of 4 mm
Component E	Glass fibre fabric "FIXIT, RÖFIX, HASIT grobmaschiges Glasfasergewebe (7x9)" approx. grammage: 132 g/m²
Component F	Finish for glass fibre fabric approx. grammage: 33 g/m²

Difference between essential, non-essential, external and internal components

The following **essential** components were identified:
Component A (Preparatory mortar): Dry applied quantity 5 kg/m²; thickness 4 mm
Component B (Insulating plaster FIXIT 222 Aerogel): Dry applied quantity 12 kg/m²; thickness 60 mm
Component D (Reinforcement layer FIXIT 223): Dry applied quantity 4 kg/m²; thickness 4 mm

The following **non-essential internal** components were identified:
Component C (Plaster base): Dry applied quantity 0.032 kg/m²; thickness < 1mm
Component E (Glass fibre fabric): Grammage 0.132 kg/m²; thickness < 1mm
Component F (Finish): Grammage 0.033 kg/m²; thickness < 1mm

Components E and F are jointly considered as a non-essential internal component (see DIN EN ISO 1716, section 7.1) as the grammage is 0.165 kg/m² and the thickness is < 1mm.

2 Test reports and test results as the basis of the classification

2.1 Test reports

Name of laboratory	Customer	Number of test report	Test method
MPA NRW	FIXIT-GRUPPE Badstraße 23 A-6832 Roethis	230009233-1 of 28.04.2014	**DIN EN 13823**
MPA NRW	FIXIT-GRUPPE Badstraße 23 A-6832 Roethis	230009346-1 of 28.04.2014	**DIN EN ISO 1716**

2.2 Test results

Test method	Number of tests	Parameters	Test results
DIN EN 13823	3	$FIGRA_{0.2\,MJ}$ (W/s) $FIGRA_{0.4\,MJ}$ (W/s) THR_{600s} (MJ) LFS	4 4 0.8 < Edge
		SMOGRA (m^2/s^2) TSP_{600s} (m^2)	0 26
		Duration of flaming droplets/particles (s)	0
DIN EN ISO 1716	3	Q_{PCSA} (MJ/kg)	-1.154
	calculated	Q_{PCSSA} (MJ/m²)	0.000 [1]
	3	Q_{PCSB} (MJ/kg)	2.558
	calculated	Q_{PCSSB} (MJ/m²)	30.696
	3	Q_{PCSC} (MJ/kg)	27.750
	calculated	Q_{PCSSC} (MJ/m²)	0.888
	3	Q_{PCSD} (MJ/kg)	-0.785
	calculated	Q_{PCSSD} (MJ/m²)	0.000 [1]
	3	Q_{PCSE} (MJ/kg)	-0.111
	calculated	Q_{PCSSE} (MJ/m²)	0.000 [1]
	3	Q_{PCSF} (MJ/kg)	39.955
	calculated	Q_{PCSSF} (MJ/m²)	1.319
	calculated	$Q_{PCSS\,(E+F)}$ (MJ/m²)	1.319
	calculated	Q_{PCS} (MJ/kg)	1.482

1) **0.000 MJ/m²** (in accordance with DIN EN ISO 1716, section 9.4.1 for further calculation)

3 Classification and direct range of application

3.1 Reference

The classification was carried out in conformity with sections 11 and 14.1 of the standard DIN EN 13501-1 : 2010.

3.2 Classification

The material is classified with regard to its reaction to fire as: **A2**

The additional classification with regard to smoke production is: **s1**

The additional classification with regard to flaming droplets is: **d0**

This results in the following classification of the material's reaction to fire:

Reaction to fire	Smoke production	Flaming droplets
A2	**s1**	**d0**

i.e. **A2 – s1, d0**

3.3 Application range of the product

The classification applies only to the construction product described in section 1. The construction product must be applied to substrates that conform to class A2-s1, d0 in accordance with DIN EN 13501-1. The minimum thickness of these substrates must be 9 mm and the minimum bulk density must be 652.5 kg/m³.

4 Restrictions

This classification report is not a substitute for a type approval or product certification.

This classification report is issued additionally to the classification report written in German language with the same report number. This classification report is only valid in combination with the German report. In case of doubt the German version is solely valid.

Erwitte, 28.04.2014

By order

Director of the Notified Body
By proxy

Materialprüfungsamt MPA NRW 15

(Dipl.-Ing. Kühnen)

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