

## Report of the classification of the reaction to fire performance

**No. 230008323-3**  
issued 13 February 2012

### English version

**Sponsor :** LG Hausys Europe GmbH  
12 Avenue des Morgines  
1213 Petit-Lancy, Geneva  
Schweiz

**Order:** Classification of the reaction to fire behaviour  
according to DIN EN 13501-1

**Date of order:** 21 November 2011

**Notified Body No.:** -0432-

**Name of the building product which is to be classified:**

Facade panels "HI-MACS®"

This report determines the classification of the above-mentioned building product in accordance with the test method stated in the standard DIN EN 13501-1.

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This classification report includes 4 pages.

## 1 Description of the building product

### Facade panels

Trade name:	HI-MACS®	
Product name:	Alpine White (CE MED)	
Product Code:	S728	
Thickness of the material:	12 mm	
Material composition:	approx. 70%	ATH (aluminium hydroxide),
	approx. 28%	PMMA & MMA,
	approx. 2%	natural pigments

Weight per unit area of the panels: 21.2 kg/m<sup>2</sup>

Colour of the panels: white

The facade panels are mechanically fixed using the BWM-profile system "ATK 103 S20" to calcium silicate boards according to DIN EN 13238, table 1.

## 2 Test reports and test results which form the basis of the classification

### 2.1 Test reports

Name of the laboratory	Sponsor	Number of the test report	Test method
MPA NRW	LG Hausys Europe GmbH 12 Avenue des Morgines 1213 Petit-Lancy, Geneva Schweiz	230008323-1	<b>DIN EN 13823</b>
MPA NRW	LG Hausys Europe GmbH 12 Avenue des Morgines 1213 Petit-Lancy, Geneva Schweiz	230008323-2	<b>DIN EN ISO 11925-2</b>

### 2.2 Test results

Test method	Number of tests	Parameter	Test results
DIN EN 13823	4	FIGRA <sub>0,2 MJ</sub> (W/s)	36
		FIGRA <sub>0,4 MJ</sub> (W/s)	36
		THR <sub>600s</sub> (MJ)	5,6
		LFS	< edge
		SMOGRA (m <sup>2</sup> /s <sup>2</sup> )	0
		TSP <sub>600s</sub> (m <sup>2</sup> )	14
		Duration of the burning droplets / particles (s)	0
DIN EN ISO 11925-2	12	F <sub>s</sub> (mm)	≥ 150
Impingement: 30 s		burning droplets / particles	no

### 3 Classification and direct field of application

#### 3.1 Reference

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

#### 3.2 Classification

The tested material in relation to its fire behaviour is classified as: **B**

The additional classification regarding smoke production is: **s1**

The additional classification regarding burning droplets / particles is: **d0**

This results in a classification of the fire behaviour of the tested material :

Fire behaviour	Smoke production	Burning droplets / particles
<b>B</b>	<b>s1</b>	<b>d0</b>

i.e. **B-s1,d0**

#### 3.3 Field of application of the product

The classification is solely valid for the building product described in clause 1 with a thickness of 12 mm, with a distance of  $\geq 40$  mm to other plane building products or directly laid onto substrates classified as class A1 or A2-s1, d0 according to DIN EN 13501-1 which have a thickness of at least 6 mm and a minimum density of 37.5 kg/m<sup>3</sup>.

The facade panels are mechanically fixed using the BWM-profile system "ATK 103 S20" to calcium silicate boards according to DIN EN 13238, table 1.

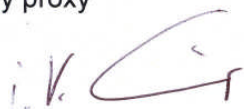
#### 4 Restrictions

This classification report does not replace any type approval or certification of the product.

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

Erwitte, 13 February 2012

Head of the testing body  
 by proxy



(Dipl.-Ing. Kühnen)

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