

# MFPA Leipzig GmbH

Prüf-, Überwachungs- und Zertifizierungsstelle für  
Baustoffe, Bauprodukte und Bausysteme

Geschäftsbereich III - Baulicher Brandschutz  
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Arbeitsgruppe 3.1 - Brandverhalten von Bauprodukten

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## Classification Report No. KB 3.1/13-180-2

Report on the classification of the fire behavior

of July 1, 2013

1<sup>st</sup> copy

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Client: Vitrulan Textile Glass GmbH  
Bernecker Strasse 8  
95509 Marktschorgast

Subject matter: Classification of the fire behavior according to DIN EN 13501-1:2010

Object: Group 1: SYSTEXX „Slip-resistant glass fabric for the decorative and functional wall design as natural white or white-pigmented material with and without water-activated glue coat at the rear side.“

Order date: 03/06/2013

Prepared by: M. Claus

This classification report consists of 6 sheets.

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Nach Landesbauordnung (SAC 02) anerkannte und nach Bauproduktengesetz (NB 0800) notifizierte PÜZ-Stelle.

Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen Leipzig mbH (MFPA Leipzig GmbH)

Sitz: Hans-Weigel-Str. 2b – 04319 Leipzig/Germany  
Geschäftsführer: Prof. Dr.-Ing. Frank Dehn  
Handelsregister: Amtsgericht Leipzig HRB 17719  
USt-Id Nr.: DE 813200649  
Tel.: +49 (0) 341 - 6582-0  
Fax: +49 (0) 341 - 6582-135

## 1 Details of the classified building product

According to the client, the building product to be classified was a product representative of group 1: SYSTEXX „ Slip-resistant glass fabric for the decorative and functional wall design as natural white or white-pigmented material with and without water-activated glue coat at the rear side “, which was glued over the full surface of plasterboards.

The glass fabric had a white color.

The specimens were prepared without additional paint coat.

According to the client, the building product met the following European product certifications: DIN EN 15102:2011.

### 1.1 Properties of the classified building products

The client grouped the products in a product family with the appropriate properties.

Table 1: Material properties of the product representative of group 1 SYSTEXX selected by the client

|  |             |
|--|-------------|
| Thickness [mm]                           | approx. 0.6 |
| Weight per unit area [g/m <sup>2</sup> ] | approx. 321 |
| Loss on ignition [g/m <sup>2</sup> ]     | approx. 100 |

### 1.2 Setup for the tests according to DIN EN 13823

The 0.6 mm thick samples were glued to 12.5 mm thick plasterboards according to DIN EN 13238 Table 1.

The product representative of group 1 SYSTEXX was arranged vertically forming a cross joint according to DIN EN 13823, section 5.2.2, item e) at the plasterboard carrier panel.



## 2 Test reports and test results used as basis for classification

### 2.1 Test reports

| Name of laboratory | Client                            | Number of test report           | Test method                               |
|--------------------|-----------------------------------|---------------------------------|---|
| MFPA Leipzig GmbH  | VITRULAN<br>Textile Glass<br>GmbH | PB3.1/09-410Ä<br>of 26/03/2010  | DIN EN 13823                              |
| MFPA Leipzig GmbH  | VITRULAN<br>Textile Glass<br>GmbH | PB3.1/09-398Ä<br>of 26/03/2010  | DIN EN 13823                              |
| MFPA Leipzig GmbH  | VITRULAN<br>Textile Glass<br>GmbH | PB3.1/10-030-1<br>of 05/02/2010 | DIN EN 13823                              |
| MFPA Leipzig GmbH  | VITRULAN<br>Textile Glass<br>GmbH | PB3.1/09-408Ä<br>of 26/03/2010  | DIN EN ISO 11925-2<br>(30 s flaming time) |
| MFPA Leipzig GmbH  | VITRULAN<br>Textile Glass<br>GmbH | PB3.1/09-400Ä<br>of 23/03/2010  | DIN EN ISO 11925-2<br>(30 s flaming time) |
| MFPA Leipzig GmbH  | VITRULAN<br>Textile Glass<br>GmbH | PB3.1/10-030-2<br>of 08/02/2010 | DIN EN ISO 11925-2<br>(30 s flaming time) |

**2.2 Test results according to DIN EN 13823 for the selected product representative of group 1 SYSTEXX**

| Test method                         | Parameter                                | Number of tests | Test results                           |                       |
|-------------------------------------|--|-----------------|--|-----------------------|
|                                     |  |                 | Constant parameters (average value)    | Requirement met (Y/N) |
| EN 13823                            |  |                 |  |                       |
|                                     | Figra <sub>0.2 MJ</sub>                  | 3               | 55                                     | (-)                   |
|                                     | Figra <sub>0.4 MJ</sub>                  | 3               | 0                                      | (-)                   |
|                                     | LFS < edge                               | 3               | (-)                                    | Y                     |
|                                     | THR <sub>600s</sub> [MJ]                 | 3               | 1.0                                    | (-)                   |
|                                     | Smogra [m <sup>2</sup> /s <sup>2</sup> ] | 3               | 0                                      | (-)                   |
|                                     | TSP <sub>600s</sub> [m <sup>2</sup> ]    | 3               | 18                                     | (-)                   |
| Burning dripping down/dropping down | 3  | (-)             | No burning dripping down/dropping down |                       |

(-) not applicable

**2.3 Test results according to DIN EN ISO 11925-2 for the selected product representative of group 1 SYSTEXX**

| Test method   | Parameter                           | Number of tests | Test results                        |  |
|---|-------------------------------------|-----------------|-------------------------------------|--|
|   |                                     |                 | Constant parameters (average value) | Requirement met (Y/N)                  |
| DIN EN ISO 11925-2<br>Area and edge flaming<br>30 s flaming |                                     |                 |                                     |  |
|   | F <sub>s</sub> ≤ 150 mm             | 7               | (-)                                 | Y                                      |
|   | Burning dripping down/dropping down | 7               | (-)                                 | No burning dripping down/dropping down |
|   | Ignition of filter paper            | 7               | (-)                                 | No ignition                            |

(-) not applicable



### 3 Classification and field of application

#### 3.1 Basis of classification

This classification was carried out in compliance with sections 11 and 14.1 of the norm DIN EN 13501-1:2010 as well as the product norm DIN EN 15102:2011.

#### 3.2 Classification

The product representative of group 1: SYSTEXX „Slip-resistant glass fabric for the decorative and functional wall design as natural white or white-pigmented material with and without water-activated glue coat at the rear side “

Is classified in terms of its fire behavior: B

Additional classification in terms of smoke development: s1

Additional classification in terms of burning dripping down/dropping down is: d0

The format of classification of the fire behavior of the building product is:

| Fire behavior |   | Smoke development |   |  | Burning dripping down/dropping down |   |
|---------------|---|-------------------|---|--|-------------------------------------|---|
| B             | - | s                 | 1 |  | d                                   | 0 |

i.e. B – s1, d0

**Classification of fire behavior: B – s1, d0**

### 3.3 Field of application of product

This classification in section 3.2 shall be valid only for the building products described in section 1 and shall be applicable to the following final conditions of application:

- The product representative of group 1: SYSTEXX „ Slip-resistant glass fabric for the decorative and functional wall design as natural white or white-pigmented material with and without water-activated glue coat at the rear side.“ may be used at plasterboards and substrates of Euro class A1 or A2-s1, d0 with a minimum bulk density of 525 kg/m<sup>3</sup> and a minimum thickness of 12 mm.
- The thickness of the glass fabric shall be  $\leq 0.6$  mm.
- Classification for the glass fabrics shall be applicable to weights per unit area of  $\leq 321$  g/m<sup>2</sup>.
- Classification shall be applicable to gluing with commercial dispersion glue for a wet application amount of  $\leq 350$  g/m<sup>2</sup> or to gluing with water-activated glue coat at the rear side.
- Classification shall be applicable to glass fabrics with a maximum loss on ignition of 100 g/m<sup>2</sup>
- Classification shall be applicable to use without paint.

## 4 Restrictions

- 4.1 In connection with other building products, in particular insulation materials with bulk density ranges other than those given in section 3.3, the fire behavior may be affected such that the classification in section 3.2 is no longer applicable. The fire behavior in connection with other building products or other bulk density ranges or thickness ranges shall be demonstrated separately.
- 4.2 The classification assigned to the building product in this report is suitable for the manufacturer's statement of conformity within the verification procedure system 3 together with a CE mark within the Building Products Guideline.
- 4.3 This document shall not be deemed a type approval or product certification and shall not substitute a verification of applicability according to State building regulations, if any, as required under the provisions of the German building law (State building regulations).
- 4.4 This classification report shall be valid as long as the product composition and the product structure, respectively, the base materials or the production process and building regulations are not modified.

Leipzig, July 1, 2013

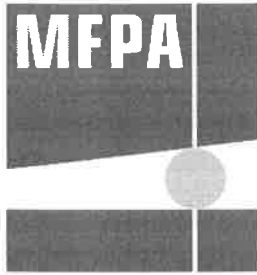
Dr.-Ing. P. Nause  
*Head of Business Division*

Dipl.-Phys. G. Brinkmann  
*Head of Testing Centre*

M. Claus  
*Testing Engineer*

Having been publicly appointed and generally sworn in as a translator for English by the President of the Leipzig Regional Court, I hereby certify the above translation of the document submitted to me as an original in the German language to be correct and complete.  
Leipzig, 30/07/2013





# MFPA Leipzig GmbH

Testing, Inspection and Certification Authority for  
Construction Products and Construction Types

Business Division III - Structural Fire Protection

Dr.-Ing. Peter Nause

Work Group 3.1 - Fire Behavior of Building Products

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-Certified translation from German-

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## Classification Report No. KB 3.1/13-180-4

Report on the classification of the fire behavior

of July 1, 2013

1<sup>st</sup> copy

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Client: Vitruvan Textile Glass GmbH  
Bernecker Strasse 8  
95509 Marktschorgast

Subject matter: Classification of the fire behavior according to DIN EN 13501-1:2010

Object: Group 2: SYSTEXX „White pigmented glass mat with and without polyester fibers for the decorative and functional wall design with and without water-activated glue coat at the rear side.“

Order date: 03/06/2013

Prepared by: M. Claus

This classification report consists of 5 sheets.

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Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen Leipzig mbH (MFPA Leipzig GmbH)

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Fax: +49 (0) 341 - 6582-135

## 1 Details of the classified building product

According to the client, the building product to be classified was a product representative of group 2: „SYSTEXX Pigmented glass mat with and without polyester fibers for the decorative and functional wall design with and without water-activated glue coat at the rear side“, which was glued over the full surface of plasterboards.

The glass fabric had a white color.

The specimens were prepared without additional paint coat.

According to the client, the building product met the following European product certifications: DIN EN 15102:2011.

### 1.1 Properties of the classified building products

The client grouped the products in a product family with the appropriate properties.

Table 1: Material properties of the product representative of group 2 SYSTEXX selected by the client

|  |             |
|--|-------------|
| Thickness [mm]                           | approx. 0.4 |
| Weight per unit area [g/m <sup>2</sup> ] | approx. 226 |
| Loss on ignition [g/m <sup>2</sup> ]     | approx. 81  |

### 1.2 Setup for the tests according to DIN EN 13823

The 0.4 mm thick samples were glued to 12.5 mm thick plasterboards according to DIN EN 13238 Table 1.

The product representative of group 2 SYSTEXX was arranged vertically forming a cross joint according to DIN EN 13823, section 5.2.2, item e) at the plasterboard carrier panel.



## 2 Test reports and test results used as basis for classification

### 2.1 Test reports

| Name of laboratory | Client                         | Number of test report           | Test method                              |
|--------------------|--------------------------------|---------------------------------|--|
| MFPA Leipzig GmbH  | VITRULAN<br>Textile Glass GmbH | PB3.1/10-064-1<br>of 29/03/2010 | DIN EN 13823                             |
| MFPA Leipzig GmbH  | VITRULAN<br>Textile Glass GmbH | PB3.1/10-408-2<br>of 23/02/2011 | DIN EN 13823                             |
| MFPA Leipzig GmbH  | VITRULAN<br>Textile Glass GmbH | PB3.1/10-064-2<br>of 29/03/2010 | DIN EN ISO 11925-2<br>(30s flaming time) |
| MFPA Leipzig GmbH  | VITRULAN<br>Textile Glass GmbH | PB3.1/10-408-4<br>of 23/02/2011 | DIN EN ISO 11925-2<br>(30s flaming time) |

### 2.2 Test results according to DIN EN 13823 for the selected product representative of group 2 SYSTEXX

| Test method  | Parameter                                | Number of tests | Test results                        |  |
|--------------|--|-----------------|-------------------------------------|--|
|              |  |                 | Constant parameters (average value) | Requirement met (Y/N)                  |
| DIN EN 13823 | Figra <sub>0.2 MJ</sub>                  | 3               | 51                                  | (-)                                    |
|              | Figra <sub>0.4 MJ</sub>                  | 3               | 0                                   | (-)                                    |
|              | LFS < edge                               | 3               | (-)                                 | Y                                      |
|              | THR <sub>600s</sub> [MJ]                 | 3               | 0.9                                 | (-)                                    |
|              | Smogra [m <sup>2</sup> /s <sup>2</sup> ] | 3               | 0                                   | (-)                                    |
|              | TSP <sub>600s</sub> [m <sup>2</sup> ]    | 3               | 31                                  | (-)                                    |
|              | Burning dripping down/dropping down      | 3               | (-)                                 | No burning dripping down/dropping down |

(-) not applicable

### 2.3 Test results according to DIN EN ISO 11925-2 for the selected product representative of group 2 SYSTEXX

| Test method   | Parameter                           | Number of tests | Test results                        |  |
|---|-------------------------------------|-----------------|-------------------------------------|--|
|   |                                     |                 | Constant parameters (average value) | Requirement met (Y/N)                  |
| DIN EN ISO 11925-2 Area and edge flaming 30 s flaming | F <sub>s</sub> ≤ 150 mm             | 8               | (-)                                 | Y                                      |
|   | Burning dripping down/dropping down | 8               | (-)                                 | No burning dripping down/dropping down |
|   | Ignition of filter paper            | 8               | (-)                                 | No ignition                            |

(-) not applicable

### 3 Classification and field of application

#### 3.1 Basis of classification

This classification was carried out in compliance with sections 11 and 14.1 of the norm DIN EN 13501-1:2010 as well as the product norm DIN EN 15102:2011.

#### 3.2 Classification

The product representative of group 2: SYSTEXX „White pigmented glass mat with and without polyester fibers for the decorative and functional wall design with and without water-activated glue coat at the rear side.“

Is classified in terms of its fire behavior: B

Additional classification in terms of smoke development: s1

Additional classification in terms of burning dripping down/dropping down is: d0

The format of classification of the fire behavior of the building product is:

| Fire behavior |   | Smoke development |          |  | Burning dripping down/dropping down |          |
|---------------|---|-------------------|----------|--|-------------------------------------|----------|
| <b>B</b>      | - | <b>s</b>          | <b>1</b> |  | <b>d</b>                            | <b>0</b> |

i.e. **B – s1, d0**

|  |
|--|
| <b>Classification of fire behavior: B – s1, d0</b> |
|--|

### 3.3 Field of application of product

This classification in section 3.2 shall be valid only for the building products described in section 1 and shall be applicable to the following final conditions of application:

- The product representative of group 2: SYSTEXX „White pigmented glass mat with and without polyester fibers for the decorative and functional wall design with and without water-activated glue coat at the rear side.“ may be used at plasterboards and substrates of Euro class A1 or A2-s1, d0 with a minimum bulk density of 525 kg/m<sup>3</sup> and a minimum thickness of 12 mm.
- The thickness of the fiber glass mat shall be  $\leq 0.4$  mm.
- Classification for the fiber glass mats shall be applicable to weights per unit area of  $\leq 226$  g/m<sup>2</sup>.
- Classification shall be applicable to gluing with water-activated rear side coat.
- Classification shall be applicable to fiber glass mats with a maximum loss on ignition of 81 g/m<sup>2</sup>
- Classification shall be applicable to use without paint.

## 4 Restrictions

- 4.1 In connection with other building products, in particular insulation materials with bulk density ranges other than those given in section 3.3, the fire behavior may be affected such that the classification in section 3.2 is no longer applicable. The fire behavior in connection with other building products or other bulk density ranges or thickness ranges shall be demonstrated separately.
- 4.2 The classification assigned to the building product in this report is suitable for the manufacturer's statement of conformity within the verification procedure system 3 together with a CE mark within the Building Products Guideline.
- 4.3 This document shall not be deemed a type approval or product certification and shall not substitute a verification of applicability according to State building regulations, if any, as required under the provisions of the German building law (State building regulations).
- 4.4 This classification report shall be valid as long as the product composition and the product structure, respectively, the base materials or the production process and building regulations are not modified.

Leipzig, July 1, 2013

Dr.-Ing. P. Nause  
Head of Business Division

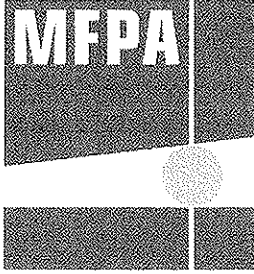
Dipl.-Phys. G. Brinkmann  
Head of Testing Centre

M. Claus  
Testing Engineer

Having been publicly appointed and generally sworn in as a translator for English by the President of the Leipzig Regional Court, I hereby certify the above translation of the document submitted to me as an original in the German language to be correct and complete.

Leipzig, 30/07/2013





# Mfpa Leipzig GmbH

Testing, Inspection and Certification Authority for  
Construction Products and Construction Types

Business Division III - Structural Fire Protection  
Dr.-Ing. Peter Nause

Work Group 3.1 - Fire Behavior of Building Products

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-Certified translation from German-

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## Classification Report No. KB 3.1/13-180-6

Report on the classification of the fire behavior

of July 1, 2013

1<sup>st</sup> copy

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Client: Vitruvan Textile Glass GmbH  
Bernecker Strasse 8  
95509 Marktschorgast

Subject matter: Classification of the fire behavior according to DIN EN 13501-1:2010

Object: Group 3: SYSTEXX „White magnetic glass fabric/magnetic glass mat for the decorative and, at the same time, functional wall design with patented magnetically active rear side.“

Order date: 03/06/2013

Prepared by: M. Claus

This classification report consists of 6 sheets.

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## 1 Details of the classified building product

According to the client, the building product to be classified was a product representative of group 3: SYSTEXX „White magnetic glass fabric/magnetic glass mat for the decorative and, at the same time, functional wall design with patented magnetically active rear side“, which was glued over the full surface of plasterboards by commercial dispersion glue.

The glass fabric had a white color.

The specimens were prepared without additional paint coat.

According to the client, the building product met the following European product certifications: DIN EN 15102:2011.

### 1.1 Properties of the classified building products

The client grouped the products in a product family with the appropriate properties.

Table 1: Information submitted by client:

|  |              |
|--|--------------|
| Thickness [mm]                           | approx. 0.8  |
| Weight per unit area [g/m <sup>2</sup> ] | approx. 1675 |
| Loss on ignition [g/m <sup>2</sup> ]     | approx. 216  |

### 1.2 Setup for the tests according to DIN EN 13823

The 0.8 mm thick samples were glued to 12.5 mm thick plasterboards according to DIN EN 13238 Table 1.

The product representative of group 3: SYSTEXX was arranged vertically forming a cross joint according to DIN EN 13823, section 5.2.2, item e) at the plasterboard carrier panel.



## 2 Test reports and test results used as basis for classification

### 2.1 Test reports

| Name of laboratory | Client                            | Number of test report           | Test method                              |
|--------------------|-----------------------------------|---------------------------------|--|
| MFPA Leipzig GmbH  | VITRULAN<br>Textile Glass<br>GmbH | PB3.1/10-201-1<br>of 23/06/2010 | DIN EN 13823                             |
| MFPA Leipzig GmbH  | VITRULAN<br>Textile Glass<br>GmbH | PB3.1/11-383-2<br>of 15/02/2012 | DIN EN 13823                             |
| MFPA Leipzig GmbH  | VITRULAN<br>Textile Glass<br>GmbH | PB3.1/10-201-2<br>of 23/06/2010 | DIN EN ISO 11925-2<br>(30s flaming time) |
| MFPA Leipzig GmbH  | VITRULAN<br>Textile Glass<br>GmbH | PB3.1/11-383-4<br>of 07/03/2012 | DIN EN ISO 11925-2<br>(30s flaming time) |

## 2.2 Test results according to DIN EN 13823 for the selected product representative of group 3 SYSTEXX

| Test method | Parameter                                | Number of tests | Test results                        |  |
|-------------|--|-----------------|-------------------------------------|--|
|             |  |                 | Constant parameters (average value) | Requirement met (Y/N)                  |
| EN 13823    | Figra <sub>0.2 MJ</sub>                  | 3               | 100                                 | (-)                                    |
|             | Figra <sub>0.4 MJ</sub>                  | 3               | 98                                  | (-)                                    |
|             | LFS < edge                               | 3               | (-)                                 | Y                                      |
|             | THR <sub>600s</sub> [MJ]                 | 3               | 2.3                                 | (-)                                    |
|             | Smogra [m <sup>2</sup> /s <sup>2</sup> ] | 3               | 2                                   | (-)                                    |
|             | TSP <sub>600s</sub> [m <sup>2</sup> ]    | 3               | 35                                  | (-)                                    |
|             | Burning dripping down/dropping down      | 3               | (-)                                 | No burning dripping down/dropping down |

(-) not applicable

## 2.3 Test results according to DIN EN ISO 11925-2 for the selected product representative of group 3 SYSTEXX

| Test method   | Parameter                           | Number of tests | Test results                        |  |
|---|-------------------------------------|-----------------|-------------------------------------|--|
|   |                                     |                 | Constant parameters (average value) | Requirement met (Y/N)                  |
| DIN EN ISO 11925-2<br>Area and edge flaming<br>30 s flaming | $F_s \leq 150 \text{ mm}$           | 7               | (-)                                 | Y                                      |
|   | Burning dripping down/dropping down | 7               | (-)                                 | No burning dripping down/dropping down |
|   | Ignition of filter paper            | 7               | (-)                                 | No ignition                            |

(-) not applicable

### 3 Classification and field of application

#### 3.1 Basis of classification

This classification was carried out in compliance with sections 11 and 14.1 of the norm DIN EN 13501-1:2010 as well as the product norm DIN EN 15102:2011.

#### 3.2 Classification

The product representative of group 3: SYSTEXX „White magnetic glass fabric/magnetic glass mat for the decorative and, at the same time, functional wall design with patented magnetically active rear side.“

Is classified in terms of its fire behavior: B

Additional classification in terms of smoke development: s1

Additional classification in terms of burning dripping down/dropping down is: d0

The format of classification of the fire behavior of the building product is:

| Fire behavior |   | Smoke development |   |  | Burning dripping down/dropping down |   |
|---------------|---|-------------------|---|--|-------------------------------------|---|
| B             | - | s                 | 1 |  | d                                   | 0 |

i.e. B – s1, d0

**Classification of fire behavior: B – s1, d0**



### 3.3 Field of application of product

This classification in section 3.2 shall be valid only for the building products described in section 1 and shall be applicable to the following final conditions of application:

- The product representative of group 3: SYSTEXX „White magnetic glass fabric/magnetic glass mat for the decorative and, at the same time, functional wall design with patented magnetically active rear side.“ may be used at plasterboards and substrates of Euro class A1 or A2-s1, d0 with a minimum bulk density of 525 kg/m<sup>3</sup> and a minimum thickness of 12 mm.
- The thickness of the fiber glass mat shall be  $\leq 0.8$  mm.
- Classification for the magnetic glass fabric/magnetic glass mat shall be applicable to weights per unit area of  $\leq 1675$  g/m<sup>2</sup>.
- Classification shall be applicable to gluing by commercial fabric glue for a wet application amount of  $\leq 310$  g/m<sup>2</sup>.
- Classification shall be applicable to magnetic glass fabric/magnetic glass mat with a maximum loss on ignition of 216 g/m<sup>2</sup>
- Classification shall be applicable to use without paint coat.

## 4 Restrictions

- 4.1 In connection with other building products, in particular insulation materials with bulk density ranges other than those given in section 3.3, the fire behavior may be affected such that the classification in section 3.2 is no longer applicable. The fire behavior in connection with other building products or other bulk density ranges or thickness ranges shall be demonstrated separately.
- 4.2 The classification assigned to the building product in this report is suitable for the manufacturer's statement of conformity within the verification procedure system 3 together with a CE mark within the Building Products Guideline.
- 4.3 This document shall not be deemed a type approval or product certification and shall not substitute a verification of applicability according to State building regulations, if any, as required under the provisions of the German building law (State building regulations).
- 4.4 This classification report shall be valid as long as the product composition and the product structure, respectively, the base materials or the production process and building regulations are not modified.

Leipzig, July 1, 2013

Dr.-Ing. P. Nause  
Head of Business Division

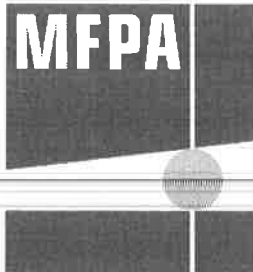
Dipl.-Phys. G. Brinkmann  
Head of Testing Centre

M. Claus  
Testing Engineer

Having been publicly appointed and generally sworn in as a translator for English by the President of the Leipzig Regional Court, I hereby certify the above translation of the document submitted to me as an original in the German language to be correct and complete.

Leipzig, 30/07/2013





# MFPA Leipzig GmbH

Testing, Inspection and Certification Authority for  
Construction Products and Construction Types

Business Division III - Structural Fire Protection

Dr.-Ing. Peter Nauze

Work Group 3.1 - Fire Behavior of Building Products

Mathias Claus

Telephone +49 (0) 341 - 6582-125

claus@mfpa-leipzig.de

-Certified translation from German-

## Classification Report No. KB 3.1/13-180-11

Report on the classification of the fire behavior

of 20 August 2013

1<sup>st</sup> copy

**Client:** Vitruvan Textile Glass GmbH  
Bernecker Strasse 8  
95509 Marktschorgast

**Subject matter:** Classification of the fire behavior according to DIN EN 13501-1:2010

**Object:** Group 5: SYSTEXX „Fiber glass fabric for the decorative and functional wall design with sound-absorbing rear side lamination of polyester, non-colored“

**Order date:** 03/06/2013

**Prepared by:** M. Claus

This classification report consists of 5 sheets.

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Nach Landesbauordnung (SAC 02) anerkannte und nach Bauproduktenverordnung (NB 0800) notifizierte PÜZ-Stelle.

Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen Leipzig mbH (MFPA Leipzig GmbH)

Sitz: Hans-Weigel-Str. 2b – 04319 Leipzig/Germany  
Geschäftsführer: Prof. Dr.-Ing. Frank Dehn  
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UST-Id Nr.: DE 813200649  
Tel.: +49 (0) 341 - 6582-0  
Fax: +49 (0) 341 - 6582-135

## 1 Details of the classified building product

According to the client, the building product to be classified was a product representative of group 5: SYSTEXX „Fiber glass fabric for the decorative and functional wall design with sound-absorbing rear side lamination of polyester, non-colored“, which was glued over the full surface of plasterboards by commercial fabric glue.

The fiber glass fabric had a white color.

The specimens were prepared without additional paint-coat.

According to the client, the building product met the following European product certifications: DIN EN 15102:2011.

### 1.1 Properties of the classified building products

The client grouped the products in a product family with the appropriate properties.

Table 1: Information submitted by client:

|  |                |
|--|----------------|
| Thickness [mm]                           | $2.9 \pm 10\%$ |
| Weight per unit area [g/m <sup>2</sup> ] | $609 \pm 10\%$ |
| Loss on ignition [g/m <sup>2</sup> ]     | $365 \pm 10\%$ |

### 1.2 Setup for tests according to DIN EN 13823

The 3 mm thick samples were glued to 12.5 mm thick plasterboards according to DIN EN 13238 Table 1.

The product representative of group 5: SYSTEXX was arranged vertically forming a cross joint according to DIN EN 13823, section 5.2.2, item e) at the plasterboard carrier panel.

## 2 Test reports and test results used as basis for classification

### 2.1 Test reports

| Name of laboratory | Client                            | Number of test report           | Test method                              |
|--------------------|-----------------------------------|---------------------------------|--|
| MFPA Leipzig GmbH  | VITRULAN<br>Textile Glass<br>GmbH | PB3.1/13-180-8<br>of 31/07/2013 | DIN EN 13823                             |
| MFPA Leipzig GmbH  | VITRULAN<br>Textile Glass<br>GmbH | PB3.1/13-180-9<br>of 31/07/2013 | DIN EN ISO 11925-2<br>(30s flaming time) |

### 2.2 Test results according to DIN EN 13823 for the selected product representative of group 5 SYSTEXX

| Test method | Parameter                                | Number of tests | Test results                        |  |
|-------------|--|-----------------|-------------------------------------|--|
|             |  |                 | Constant parameters (average value) | Requirement met (Y/N)                  |
| EN 13823    | Figra <sub>0.2 MJ</sub>                  | 3               | 113                                 | (-)                                    |
|             | Figra <sub>0.4 MJ</sub>                  | 3               | 105                                 | (-)                                    |
|             | LFS < edge                               | 3               | (-)                                 | Y                                      |
|             | THR <sub>600s</sub> [MJ]                 | 3               | 2,0                                 | (-)                                    |
|             | Smogra [m <sup>2</sup> /s <sup>2</sup> ] | 3               | 0                                   | (-)                                    |
|             | TSP <sub>600s</sub> [m <sup>2</sup> ]    | 3               | 38                                  | (-)                                    |
|             | Burning dripping down/dropping down      | 3               | (-)                                 | No burning dripping down/dropping down |

(-) not applicable

### 2.3 Test results according to DIN EN ISO 11925-2 for the selected product representative of group 5 SYSTEXX

| Test method                              | Parameter                           | Number of tests | Test results                        |  |
|--|-------------------------------------|-----------------|-------------------------------------|--|
|  |                                     |                 | Constant parameters (average value) | Requirement met (Y/N)                  |
| DIN EN ISO 11925-2<br>Flaming period 30s | Fs ≤ 150 mm                         | 8               | (-)                                 | Y                                      |
|  | Burning dripping down/dropping down | 8               | (-)                                 | No burning dripping down/dropping down |
|  | Ignition of filter paper            | 8               | (-)                                 | No ignition                            |
|  |                                     |                 |                                     |  |

(-) not applicable

### 3 Classification and field of application

#### 3.1 Basis of classification

This classification was carried out in accordance with sections 11 and 14.1 of the norm DIN EN 13501-1:2010 as well as the product norm DIN EN 15102:2011.

#### 3.2 Classification

The product representative of group 5: SYSTEXX „Fiber glass fabric for the decorative and functional wall design with sound-absorbing rear side lamination of polyester, non-colored “

Is classified in terms of its fire behavior: B

Additional classification in terms of smoke development: s1

Additional classification in terms of burning dripping down/dropping down is: d0

The format of classification of the fire behavior of the building product is:

| Fire behavior |   | Smoke development |   |  | Burning dripping down/dropping down |   |
|---------------|---|-------------------|---|--|-------------------------------------|---|
| B             | - | s                 | 1 |  | d                                   | 0 |

i.e. B – s1, d0

**Classification of fire behavior: B – s1, d0**

### 3.3 Field of application of product

This classification in section 3.2 shall be valid only for the building products described in section 1 and shall be applicable to the following final conditions of application:

- The product representative of group 5: SYSTEXX „Fiber glass fabric for the decorative and functional wall design with sound-absorbing rear side lamination of polyester, non-colored, may be used at plasterboards and substrates of Euro class A1 or A2-s1, d0 with a min. bulk density of 525 kg/m<sup>3</sup> and a min. thickness of 12 mm.
- The thickness of the glass fabric shall be  $\leq 2.9 \pm 10\%$  mm.
- Classification for the glass fabrics shall be applicable to weights per unit area of  $\leq 609 \pm 10\%$  g/m<sup>2</sup>.
- Classification shall be applicable to gluing with commercial fabric glue for a wet application amount of  $\leq 350$  g/m<sup>2</sup>.
- Classification shall be applicable to glass fabrics with a maximum loss on ignition of  $365 \pm 10\%$  g/m<sup>2</sup>
- Classification shall be applicable to use without paint coat.

## 4 Restrictions

- 4.1 In connection with other building products, in particular insulation materials with bulk density ranges other than those given in section 3.3, the fire behavior may be affected such that the classification in section 3.2 is no longer applicable. The fire behavior in connection with other building products or other bulk density ranges or thickness ranges shall be demonstrated separately.
- 4.2 This document shall not be deemed a type approval or product certification and shall not substitute a verification of applicability according to State building regulations; if any, as required under the provisions of the German building law (State building regulations).
- 4.3 This classification report shall be valid as long as the product composition and the product structure, respectively, the base materials or the production process and building regulations and/or the basis of evaluation are not modified.

Leipzig, 20 August 2013

Dr.-Ing. P. Nause  
Head of Business Division

Dipl.-Phys. G. Brinkmann  
Head of Testing Centre

M. Claus  
Testing Engineer

Having been publicly appointed and generally sworn in as a translator for English by the President of the Leipzig Regional Court, I hereby certify the above translation of the document submitted to me as an original in the German language to be correct and complete.

Leipzig, 16/09/2013



# KB-Hoch-171107-3

## KLASSIFIZIERUNGSBERICHT

Klassifizierung des Brandverhaltens nach DIN EN 13501-1<sup>1)</sup>

## CLASSIFICATION REPORT

Reaction to fire classification according to DIN EN 13501-1<sup>1)</sup>

**Auftraggeber**  
*client*

**Vitrulan Textile Glass GmbH**  
Bernecker Straße 8  
D-95509 Marktschorgast

**Artikelbezeichnung**  
*article designation*

**"GG 904 FP" und / and**  
**"GV OP 230 FP"**

**Beschreibung**

Dekorative Wandbekleidung als Rollenware; Vertreter der Produktgruppe 9 des Herstellers: "Flammgeschützt und schiebefest ausgerüstete A2-Gewebe und A2-Vliese, zur dekorativen und funktionellen Wandgestaltung, weiß; mit flammhemmenden Produkten ausgerüstet, die von OEKO-TEX® akzeptiert werden"

*description*

*Decorative wall covering; Material representing product group 9 of the manufacturer: "A2-fabric and A2-fleece wall covering with flame-retardant and non-slipping finish for decorative and functional wall design, white; finished with flame retardant products accepted by OEKO-TEX®"*

**Klassifizierung**  
*classification*

**A2 – s1,d0**

**Gültig bis**  
(ohne CE-Kennzeichnung)  
**Valid until**  
(without CE marking)

**30.09.2022** (vgl. 5.1 / cf. 5.1)



Dieser Bericht umfasst 6 Seiten. / *The report comprises 6 pages.*

Für rechtliche Belange ist ausschließlich der deutsche Wortlaut maßgebend.  
*For legal interests, only the German wording is decisive.*

<sup>1)</sup> DIN EN 13501-1:2010-01

1. **Einführung / introduction**

Dieser Klassifizierungsbericht zum Brandverhalten definiert die Klassifizierung, die dem Bauprodukt in Übereinstimmung mit den Verfahren nach DIN EN 13501-1 zugeordnet wird.

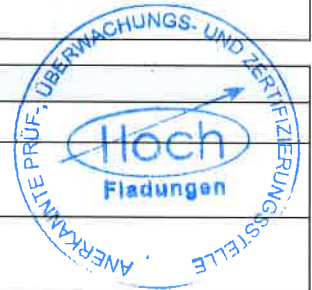
*This classification report defines the classification assigned to product in accordance with the procedures given in DIN EN 13501-1.*

2. **Beschreibung zum Bauprodukt / description of the construction product**

Das Produkt wird in den in Punkt 3.1 aufgeführten Prüfberichten, die der Klassifizierung zugrunde liegen, vollständig beschrieben. Dabei wurde das Produkt mit den folgenden Produktparametern getestet.

*The product is fully described in the test reports in support of this classification listed in clause 3.1. The product was tested adhering to the following product parameters.*

| <b>"GG 904 FP" (A2-Gewebe / A2-fabric)</b>   |                           |
|--|---------------------------|
| Gesamtdicke / total thickness:               | ≈ 0,75 mm                 |
| Flächengewicht / weight per unit area        | ≈ 0,516 kg/m <sup>2</sup> |
| Rohgewicht / gross weight                    | ≈ 0,225 kg/m <sup>2</sup> |
| Appreturgewicht / finishing weight           | ≈ 0,275 kg/m <sup>2</sup> |
| <b>"GV OP 230 FP" (A2-Vlies / A2 fleece)</b> |                           |
| Gesamtdicke / total thickness:               | ≈ 0,45 mm                 |
| Flächengewicht / weight per unit area        | ≈ 0,235 kg/m <sup>2</sup> |
| Rohgewicht / gross weight                    | ≈ 0,045 kg/m <sup>2</sup> |
| Appreturgewicht / finishing weight           | ≈ 0,185 kg/m <sup>2</sup> |



Die Produkte repräsentieren nach Angaben des Herstellers die Produkte der Gruppe 9 (herstellereigene Gruppierung): "Flammgeschützt und schiebefest ausgerüstete A2-Gewebe und A2-Vliese, zur dekorativen und funktionellen Wandgestaltung, weiß; mit flammhemmenden Produkten ausgerüstet, die von OEKO-TEX® akzeptiert werden".

*According to the manufacturer, these products represent the products of group 9 (manufacturer's proprietary grouping): "A2-fabric / A2-fleece wall covering with flame-retardant and non-slipping finish for decorative and functional wall design, white; finished with flame retardant products accepted by OEKO-TEX®"*

Die Produkte erfüllen nach Angaben des Auftraggebers die europäische Produktnorm DIN EN 15102:2011-12<sup>a</sup>.

*According to the applicant, the products complies with the European product standard DIN EN 15102:2011-12<sup>a</sup>.*

<sup>a</sup> Dekorative Wandbekleidungen - Rollen- und Plattenform; Deutsche Fassung EN 15102:2007+A1:2011  
Decorative wall coverings - Roll and panel form; German version EN 15102:2007+A1:2011



**3. Prüfberichte und Prüfergebnisse als Grundlage dieser Klassifizierung**  
Test reports and test results as a basis for this classification

3.1. Prüfberichte / test reports

| Name des Labors<br><i>name of laboratory</i> | Auftraggeber<br><i>applicant</i>  | Prüfverfahren<br><i>test method</i>   | Prüfbericht Nr.<br><i>test report no.</i> |
|--|---|---|---|
| Prüfinstitut Hoch                            | <b>Vitruan Textile Glass GmbH</b><br>Bernecker Straße 8<br>D-95509 Marktschorgast | DIN EN ISO 1716<br>(Bestimmung der Verbrennungswärme /<br><i>combustion heat test</i> ) | PB-Hoch-171105<br>PB-Hoch-180164          |
|  |   | DIN EN 13823<br>(SBI)   | PB-Hoch-171106<br>PB-Hoch-180165          |

3.2. Prüfergebnisse / test results

| Prüfverfahren<br><i>test method</i> | Parameter<br><i>parameter</i> | Anzahl der Prüfungen<br><i>number of tests</i> | Prüfergebnisse (Mittelwert)<br><i>test results (average value)</i> | Grenzwerte nach DIN EN 13501-1<br><i>thresholds acc. to DIN EN 13501-1</i>          |
|-------------------------------------|-------------------------------|--|--|---|
| DIN EN 13823                        | FIGRA <sub>0,2MJ</sub>        | 3  | 8,53 W/s   | ≤ 120 W/s Klasse / class A2<br>≤ 120 W/s Klasse / class B                           |
|                                     | FIGRA <sub>0,4MJ</sub>        |  | 0,00 W/s   | ≤ 250 W/s Klasse / class C<br>≤ 750 W/s Klasse / class D                            |
|                                     | THR <sub>600s</sub>           |  | 0,82 MJ  | ≤ 7,5 MJ Klasse / class A2<br>≤ 7,5 MJ Klasse / class B<br>≤ 15 MJ Klasse / class C |
|                                     | SMOGRA                        |  | 0,00 m <sup>2</sup> /s <sup>2</sup>                                | s1: ≤ 30 m <sup>2</sup> /s <sup>2</sup><br>s2: ≤ 180 m <sup>2</sup> /s <sup>2</sup> |
|                                     | TSP <sub>600s</sub>           |  | 18,32 m <sup>2</sup>   | s1: ≤ 50 m <sup>2</sup><br>s2: ≤ 200 m <sup>2</sup>                                 |
|                                     | FDP                           |  | d0   | d0: Kein Brennen / no burning   |
|                                     | LSF                           |  | erfüllt<br><i>compliant</i>  | Rand der Probe nicht erreicht<br><i>Sample edge not reached</i>                     |

**Erläuterungen / remarks:**

|                        |   |
|------------------------|---|
| FIGRA <sub>0,2MJ</sub> | Feuerwachstumswert [W/s] nach Erreichen des THR-Schwellenwertes 0,2 MJ<br><i>Fire Growth Rate [W/s] after reaching a THR threshold of 0.2 MJ</i>  |
| FIGRA <sub>0,4MJ</sub> | Feuerwachstumswert [W/s] nach Erreichen des THR-Schwellenwertes 0,4 MJ<br><i>Fire Growth Rate [W/s] after reaching a THR threshold of 0.4 MJ</i>  |
| THR <sub>600s</sub>    | Gesamte freigesetzte Wärme während der ersten 600 Sekunden Beflammung [MJ]<br><i>Total heat release during the first 600 seconds of flame impingement [MJ]</i>                                  |
| SMOGRA                 | Rauchentwicklungsrates [m <sup>2</sup> /s <sup>2</sup> ]<br><i>Smoke Growth Rate [m<sup>2</sup>/s<sup>2</sup>]</i>  |
| TSP <sub>600s</sub>    | gesamte freigesetzte Rauchmenge während der ersten 600 Sekunden Beflammung [m <sup>2</sup> ]<br><i>Total smoke production during the first 600 seconds of flame impingement [m<sup>2</sup>]</i> |
| LSF                    | seitliche Flammenausbreitung bis zur Außenkante des langen Probenflügels<br><i>lateral spread of flame, reaching the far edge of the large sample wing</i>                                      |
| FDP:                   | brennendes Abtropfen während der ersten 600 Sekunden Beflammung [s]<br><i>flaming droplets / particles during the first 600 seconds of flame impingement [s]</i>                                |

Tabelle / table 1: Prüfergebnisse der SBI Prüfungen / test results of the SBI tests



| Prüfverfahren<br><i>test method</i>  | Material / <i>material</i>   | Ergebnisse<br><i>results</i> | Grenzwerte<br>nach DIN EN 13501-1<br><i>thresholds acc. to<br/>DIN EN 13501-1</i> |
|--|--|------------------------------|---|
| DIN EN ISO 1716  | Wandbelag und Kleber /<br><i>wallpaper and glue</i><br>( $\Sigma$ der Einzelwerte, der äußeren<br>nichtsubstanzialen Bestandteile /<br>$\Sigma$ <i>external non-substantial components</i> ) | 1,638 MJ/m <sup>2</sup>      | PCS $\leq$ 4,0 MJ/m <sup>2</sup> b)   |
|  | PCS (für Gesamtprodukt)<br><i>PCS (whole product)</i>  | 2,844 MJ/kg                  | PCS $\leq$ 3,0 MJ/kg e)   |
| a) Für homogene Bauprodukte und substanziale Bestandteile von nichthomogenen Bauprodukten.<br><i>For homogeneous products and substantial components of non-homogeneous products.</i><br>b) Für jeden äußeren nichtsubstanzialen Bestandteil von nichthomogenen Bauprodukten.<br><i>For any external non-substantial component of non-homogeneous products.</i><br>c) Alternativ kann ein äußerer nichtsubstanzialer Bestandteil ein PCS $\leq$ 2,0 MJ/m <sup>2</sup> haben, vorausgesetzt das Produkt erfüllt die folgenden Kriterien der EN 13823: FIGRA $\leq$ 20 W/s und LFS < Rand des Probekörpers und THR <sub>600s</sub> $\leq$ 4,0 MJ und s1 und d0.<br><i>Alternatively, any external non-substantial component may have a PCS <math>\leq</math> 2,0 MJ/m<sup>2</sup>, provided that the product satisfies the following criteria of EN 13823: FIGRA <math>\leq</math> 20 W/s and LFS &lt; edge of specimen, and THR<sub>600s</sub> <math>\leq</math> 4,0 MJ, and s1, and d0.</i><br>d) Für jeden inneren nichtsubstanzialen Bestandteil von nichthomogenen Bauprodukten.<br><i>For any internal non-substantial component of non-homogeneous products.</i><br>e) Für das Produkt als Ganzes. / <i>For the product as a whole.</i> |  |                              |   |
| <b>Erläuterungen zur Tabelle / notes to the table:</b>   |  |                              |   |
| PCS: Brutto-Verbrennungswärme (Brennwert) / <i>gross heat of combustion (calorific value)</i> [MJ/kg oder MJ/m <sup>2</sup> ]  |  |                              |   |
| Tabelle / table 2: Prüfergebnisse der Brennwertbestimmung /<br><i>test results of the determination of calorific value</i>   |  |                              |   |



**4. Klassifizierung und Anwendungsgebiet**  
*classification and field of application*

**4.1. Klassifizierung / classification**

Die Klassifizierung ist nach DIN EN 13501-1:2007, Abschnitt 11 erfolgt.  
*This classification has been carried out acc. to DIN EN 13501-1:2007 section 11.*

| Brandverhalten<br><i>fire behaviour</i> |   | Rauchentwicklung<br><i>smoke production</i> |          |   | Brennendes Abtropfen/Abfallen<br><i>flaming droplets</i> |          |
|---|---|---|----------|---|--|----------|
| <b>A2</b>                               | – | <b>s</b>                                    | <b>1</b> | , | <b>d</b>   | <b>0</b> |

**Klassifizierung / classification: A2 – s1,d0**

#### 4.2. Anwendungsgebiet / field of application

Die Klassifizierung in Abschnitt 4.1 ist nur für das auf Seite 1 genannte und im Abschnitt 2 näher beschriebene Bauprodukt für die folgenden Endanwendungen gültig:

- Anbringung an Wände und Decken im Innen-/Außenbereich.

*The classification in section 4.1 is valid solely for the product referred to on page 1 and described in detail in section 2 and for the following end use applications:*

- *Application on walls and ceilings for interior or exterior use.*

Diese Klassifizierung gilt für folgende Endanwendungsbedingungen:

- Das Produkt muss direkt aufgebracht werden auf Gipsplatten und Untergründe der Klasse A1 oder A2-s1,d0 mit einer Dicke von  $\geq 12$  mm und einer Rohdichte  $\geq 525$  kg/m<sup>3</sup>.
- Dabei ist der Klebstoff "Silikatgewebekleber" des Antragstellers zu verwenden. Dabei ist eine Auftragsmenge von höchstens 200 g/m<sup>2</sup> einzuhalten.

*This classification is valid for the following end use conditions:*

- *The product must be applied on gypsum plasterboards and materials of the class A1 or A2-s1,d0 with a thickness  $\geq 12$  mm and a density  $\geq 525$  kg/m<sup>3</sup>.*
- *The product must be applied using the glue "Silikatgewebekleber" marketed by the client. A maximum wet application amount of 200 g/m<sup>2</sup> must be observed.*

#### 5. Einschränkungen / limitations

##### 5.1. Geltungsdauer / validity

Siehe Seite 1 / See page 1

Der Klassifizierungsbericht verliert seine Gültigkeit, wenn sich die Klassifizierungskriterien gemäß DIN EN 13501-1 ändern oder ergänzt werden, oder wenn die Produktzusammensetzung oder der Produktaufbau geändert werden.

Wenn keine kontinuierliche Überprüfung des Brandverhaltens durch den Hersteller stattfindet, verliert dieser Klassifizierungsbericht bei jeder Änderung des Produktionsprozesses, des Produktionsumfeldes, der Ausgangsstoffe oder der Zulieferers der Komponenten seine Gültigkeit. Das Brandverhalten muss dann erneut nachgewiesen werden.

*This classification report is no longer valid as soon as the classification criteria according to DIN EN 13501-1 are altered or amended, or as soon as the product formulation or its composition are altered.*

*If the fire behaviour of the product is not continuously monitored by the manufacturer, each change in either production process, production environment, raw materials, or chain of suppliers causes this classification to become invalid. In this case, the fire behaviour has to be reassessed.*

##### 5.2. Hinweise / warnings

In Verbindung mit anderen Baustoffen, mit anderen Abständen, Befestigungen, Fugenausbildungen/Verbindungen, Dicken- oder Rohdichtenbereichen, Beschichtungen als in Abschnitt 2 angegeben, kann das Brandverhalten so ungünstig beeinflusst werden, dass die Klassifizierung in Abschnitt 4.1 nicht mehr gilt. Das Brandverhalten von anderen als den oben angegebenen Parametern ist gesondert nachzuweisen.

*Used in combination with other materials, esp. other substrates/backings, air gaps/voids, types of fixation joints, thickness or density ranges, coatings than those given in clause 2, the fire performance is likely to be influenced negatively, so that the classification given in clause 4.1 will no longer be valid. The fire performance with parameters other than those given above has to be tested and classified separately.*



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Der Klassifizierungsbericht darf ohne vorherige Zustimmung des Prüfinstitut Hoch nur innerhalb des Geltungszeitraumes und nur nach Form und Inhalt unverändert veröffentlicht oder vervielfältigt werden.  
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*This document does not represent type approval or certification of the product.*

Fladungen, 14.05.2018

Sachbearbeiter  
Clerk in charge



(Dipl.-NanoSc. Christoph Glotzbach)



Leiter der Prüfstelle /  
Head of test laboratory



(Dipl.-Ing.(FH) Andreas Hoch)

# KB-Hoch-171217

## KLASSIFIZIERUNGSBERICHT

Klassifizierung des Brandverhaltens nach DIN EN 13501-1<sup>1)</sup>

## CLASSIFICATION REPORT

Reaction to fire classification according to DIN EN 13501-1<sup>1)</sup>

**Auftraggeber**  
client

**Vitruan Textile Glass GmbH**  
Bernecker Straße 8  
D-95509 Marktschorgast



**Artikelbezeichnung**  
article designation

„GV 1011 EP“

**Beschreibung**

Dekorative Wandbekleidung als Rollenware; Vertreter der Produktgruppe 10 des Herstellers: "Mit Effektmaterial bedrucktes Glas- und Zellulosevlies zur dekorativen und funktionellen Wandgestaltung"

*description*

*Decorative wall covering; material representing product group 10 of the manufacturer: "Glass and cellulose fleece printed with fancy material for decorative and functional wall design"*

**Klassifizierung**  
classification

**B – s1,d0**

**Geltungsdauer / validity**

siehe Abschnitt 5.1 / confer to section 5.1

**Ausgabedatum**  
issue date

26.10.2017

Dieser Bericht umfasst 5 Seiten. / *The report comprises 5 pages.*

Für rechtliche Belange ist ausschließlich der deutsche Wortlaut maßgebend.  
*For legal interests, only the German wording is decisive.*

<sup>1)</sup> DIN EN 13501-1:2010-01

### 1. Einführung / introduction

Dieser Klassifizierungsbericht zum Brandverhalten definiert die Klassifizierung, die dem Bauprodukt in Übereinstimmung mit den Verfahren nach DIN EN 13501-1 zugeordnet wird.

*This classification report defines the classification assigned to product in accordance with the procedures given in DIN EN 13501-1.*

### 2. Beschreibung zum Bauprodukt / description of the construction product

Das Produkt wird in den in Punkt 3.1 aufgeführten Prüfberichten, die der Klassifizierung zugrunde liegen, vollständig beschrieben. Dabei wurde das Produkt mit den folgenden Produktparametern getestet.

*The product is fully described in the test reports in support of this classification listed in clause 3.1. The product was tested adhering to the following product parameters.*

| „GV 1011 EP“                          |                           |
|---------------------------------------|---------------------------|
| Gesamtdicke / total thickness:        | ≈ 0,9 mm                  |
| Flächengewicht / weight per unit area | ≈ 0,380 kg/m <sup>2</sup> |

Das Produkt repräsentiert nach Angaben des Herstellers die Produkte der Gruppe 10 (herstellereigene Gruppierung): "Mit Effektmaterial bedrucktes Glas- und Zellulosevlies zur dekorativen und funktionellen Wandgestaltung".

*According to the manufacturer, this product represents the products of group 10 (manufacturers proprietary grouping): "Glass and cellulose fleece printed with fancy material for decorative and functional wall design"*

Das Produkt erfüllt nach Angaben des Auftraggebers die europäische Produktnorm DIN EN 15102:2011-12<sup>a</sup>.

*According to the applicant, the product complies with the European product standard DIN EN 15102:2011-12<sup>a</sup>.*

### 3. Prüfberichte und Prüfergebnisse als Grundlage dieser Klassifizierung

*Test reports and test results as a basis for this classification*

#### 3.1. Prüfberichte / test reports

| Name des Labors<br>name of laboratory | Auftraggeber<br>applicant  | Prüfverfahren<br>test method                                       | Prüfbericht Nr.<br>test report no. |
|---------------------------------------|--|--|------------------------------------|
| Prüfinstitut Hoch                     | <b>Vitrulan Textile Glass GmbH</b><br>Bernecker Straße 8<br>D-95509 Marktschorgast | DIN EN ISO 11925-2<br>(Kleinbrenner /<br>single flame source test) | PB-Hoch-171215                     |
|                                       |  | DIN EN 13823<br>(SBI)  | PB-Hoch-171216                     |

<sup>a</sup> Dekorative Wandbekleidungen - Rollen- und Plattenform; Deutsche Fassung EN 15102:2007+A1:2011  
Decorative wall coverings - Roll and panel form; German version EN 15102:2007+A1:2011

3.2. Prüfergebnisse / test results

| Prüfverfahren<br><i>test method</i> | Parameter<br><i>parameter</i> | Anzahl der Prüfungen<br><i>number of tests</i> | Prüfergebnisse (Mittelwert)<br><i>test results (average value)</i> | Grenzwerte nach DIN EN 13501-1<br><i>thresholds acc. to DIN EN 13501-1</i>                          |
|-------------------------------------|-------------------------------|--|--|---|
| DIN EN 13823                        | FIGRA <sub>0,2MJ</sub>        | 3  | 91,07 W/s  | ≤ 120 W/s Klasse / class A2<br>≤ 120 W/s Klasse / class B   |
|                                     | FIGRA <sub>0,4MJ</sub>        |  | 70,63 W/s  | ≤ 250 W/s Klasse / class C<br>≤ 750 W/s Klasse / class D  |
|                                     | THR <sub>600s</sub>           |  | 1,33 MJ  | ≤ 7,5 MJ Klasse / class A2<br>≤ 7,5 MJ Klasse / class B<br>≤ 15 MJ Klasse / class C                 |
|                                     | SMOGRA                        |  | 0,00 m <sup>2</sup> /s <sup>2</sup>                                | s1: ≤ 30 m <sup>2</sup> /s <sup>2</sup><br>s2: ≤ 180 m <sup>2</sup> /s <sup>2</sup>                 |
|                                     | TSP <sub>600s</sub>           |  | 31,68 m <sup>2</sup>   | s1: ≤ 50 m <sup>2</sup><br>s2: ≤ 200 m <sup>2</sup>   |
|                                     | FDP                           |  | d0   | d0: Kein Brennen / no burning<br>d1: ≤ 10 s Brenndauer / burning<br>d2: > 10 s Brenndauer / burning |
|                                     | LSF                           |  | erfüllt<br><i>compliant</i>  | Rand der Probe nicht erreicht<br><i>Sample edge not reached</i>                                     |

Erläuterungen / remarks:

- FIGRA<sub>0,2MJ</sub> Feuerwachstumswert [W/s] nach Erreichen des THR-Schwellenwertes 0,2 MJ  
*Fire Growth Rate [W/s] after reaching a THR threshold of 0.2 MJ*
- FIGRA<sub>0,4MJ</sub> Feuerwachstumswert [W/s] nach Erreichen des THR-Schwellenwertes 0,4 MJ  
*Fire Growth Rate [W/s] after reaching a THR threshold of 0.4 MJ*
- THR<sub>600s</sub> Gesamte freigesetzte Wärme während der ersten 600 Sekunden Beflammung [MJ]  
*Total heat release during the first 600 seconds of flame impingement [MJ]*
- SMOGRA Rauchentwicklungsrate [m<sup>2</sup>/s<sup>2</sup>]  
*Smoke Growth Rate [m<sup>2</sup>/s<sup>2</sup>]*
- TSP<sub>600s</sub> gesamte freigesetzte Rauchmenge während der ersten 600 Sekunden Beflammung [m<sup>2</sup>]  
*Total smoke production during the first 600 seconds of flame impingement [m<sup>2</sup>]*
- LSF seitliche Flammenausbreitung bis zur Außenkante des langen Probenflügels  
*lateral spread of flame, reaching the far edge of the large sample wing*
- FDP: brennendes Abtropfen während der ersten 600 Sekunden Beflammung [s]  
*flaming droplets / particles during the first 600 seconds of flame impingement [s]*

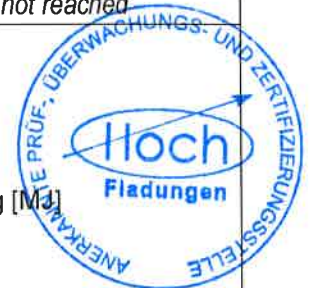


Tabelle / table 1: Prüfergebnisse der SBI Prüfungen / test results of the SBI tests

| Prüfverfahren<br><i>test method</i> | Parameter<br><i>parameter</i>                   | Anzahl der Prüfungen<br><i>number of tests</i> | Prüfergebnis (Maximalwert)<br><i>test result (maximum value)</i> | Grenzwerte nach DIN EN 13501-1<br><i>thresholds acc. to DIN EN 13501-1</i> |
|-------------------------------------|---|--|--|--|
| DIN EN ISO 11925-2                  | Fs  | 12   | 20 mm  | ≤ 150 mm   |
|                                     | Brennendes Abtropfen<br><i>flaming droplets</i> |  | nein<br><i>no</i>  | —  |

Erläuterungen zur Tabelle / notes to the table:

Fs Flammenausbreitung [mm]  
*Flame spread [mm]*

Tabelle / table 2: Prüfergebnis der Kleinbrennerprüfung / test result of the single-flame source test

**4. Klassifizierung und Anwendungsgebiet**  
*classification and field of application*

**4.1. Klassifizierung / classification**

Die Klassifizierung ist nach DIN EN 13501-1:2007, Abschnitt 11 erfolgt.  
*This classification has been carried out acc. to DIN EN 13501-1:2007 section 11.*

|   |          |   |          |          |          |  |  |
|---|----------|---|----------|----------|----------|--|--|
| Brandverhalten<br><i>fire behaviour</i> |          | Rauchentwicklung<br><i>smoke production</i> |          |          |          | Brennendes Abtropfen/Abfallen<br><i>flaming droplets</i> |  |
| <b>B</b>                                | <b>-</b> | <b>s</b>                                    | <b>1</b> | <b>,</b> | <b>d</b> | <b>0</b>   |  |

**Klassifizierung / classification: B – s1,d0**

**4.2. Anwendungsgebiet / field of application**

Die Klassifizierung in Abschnitt 4.1 ist nur für das auf Seite 1 genannte und im Abschnitt 2 näher beschriebene Bauprodukt für die folgenden Endanwendungen gültig:

- Anbringung an Wände und Decken im Innen-/Außenbereich.

*The classification in section 4.1 is valid solely for the product referred to on page 1 and described in detail in section 2 and for the following end use applications:*

- *Application on walls and ceilings for interior or exterior use.*

Diese Klassifizierung gilt für folgende Endanwendungsbedingungen:

- Das Produkt muss direkt aufgebracht werden auf Gipsplatten und Untergründe der Klasse A1 oder A2-s1,d0 mit einer Dicke von  $\geq 12$  mm und einer Rohdichte  $\geq 525$  kg/m<sup>3</sup>.
- Dabei ist der Klebstoff "Metylan NP" zu verwenden. Dabei ist eine Nass-Auftragsmenge von höchstens 200 g/m<sup>2</sup> einzuhalten.

*This classification is valid for the following end use conditions:*

- *The product must be applied on gypsum plasterboards and materials of the class A1 or A2-s1,d0 with a thickness  $\geq 12$  mm and a density  $\geq 525$  kg/m<sup>3</sup>.*
- *The product must be applied using the glue "Metylan NP". A maximum wet application amount of 200 g/m<sup>2</sup> must be observed.*

**5. Einschränkungen / limitations**

**5.1. Geltungsdauer / validity**

Siehe Seite 1 / See page 1

Die Produktklasse ist in einer harmonisierten Produktnorm geregelt. Die Zertifizierungsstelle kann eine Überprüfung des Brandverhaltens verlangen. Wir empfehlen eine Überprüfung des Brandverhaltens in einem Intervall von höchstens 5 Jahren.

*The product class is regulated in a harmonised European product standard. The certifying body may request a re-evaluation of the reaction to fire behavior. We recommend a re-evaluation in an interval of no more than 5 years.*





## 5.2. Hinweise / warnings

In Verbindung mit anderen Baustoffen, mit anderen Abständen, Befestigungen, Fugenausbildungen/Verbindungen, Dicken- oder Rohdichtenbereichen, Beschichtungen als in Abschnitt 2 angegeben, kann das Brandverhalten so ungünstig beeinflusst werden, dass die Klassifizierung in Abschnitt 4.1 nicht mehr gilt. Das Brandverhalten von anderen als den oben angegebenen Parametern ist gesondert nachzuweisen.

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Fladungen, 26.10.2017

Sachbearbeiter  
Clerk in charge



(Reinhard Speth (Techniker))



Leiter der Prüfstelle /  
Head of test laboratory



(Dipl.-Ing.(FH) Andreas Hoch)