

**Material Testing Center**  
**University of Stuttgart**  
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[MPA logo]

Testing center recognized by DIBt  
Code number BWU-03

**Fire safety department – Burning behavior of building materials unit**

**General building authority test certificate**

Test certificate number:

**P-BWU03-I-16.5.138**

**Subject:** Textile fabric made of "Trevira CS"  
as flame-resistant building material (building material category DIN 4102-B1)  
as per building regulation list A, part 2, issue 2015/2 and amendment 2016/1 and  
amendment notification 2016/2, cont. no. 2.10.2.

**Applicant:** Trevira GmbH  
Max-Fischer-Strasse 11  
86399 Bobingen  
Germany

**Issue date:** 30<sup>th</sup> August 2017

**Valid until:** 31<sup>st</sup> August 2022

Based on this general building authority test certificate, the above-mentioned item may be utilized in line with Federal building regulations.

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This general building authority test certificate consists of 7 pages and 0 attachments.

This general building authority test certificate shall replace the general building authority test certificate P-BWU03-I-16.5.138 dated 14<sup>th</sup> March 2014. The first building authority utilization certificate for this item was issued on 22<sup>nd</sup> October 1979. The place of jurisdiction and place of execution shall be Stuttgart.

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**I. General stipulations**

1. The general building authority test certificate shall not replace any permits, authorizations and certifications legally required in regard to the execution of building projects.
2. The general building authority test certificate shall be issued without prejudice to third party rights, and in particular private proprietary rights.
3. Manufacturers and distributors of the building product shall provide any users of the building products with copies of the general building authority test certificate, without prejudice to further regulations, and they shall indicate that a copy of the general building authority test certificate shall need to be available at the place of utilization.
4. The general building authority test certificate may only be duplicated in full. A publication of extracts shall require the consent of the MPA – University of Stuttgart (Otto Graf Institute). Advertisement texts and drawings may not deviate from the general building authority test certificate. Translations of the general building authority test certificate must contain the following note: "translation of the German original, which was not checked by the University of Stuttgart (Otto Graf Institute)".
5. The general building authority test certificate shall be revocable. The stipulations of the general building authority test certificate may be amended or changed in retrospect, especially based on new technical findings.
6. The building product listed in this general building authority test certificate shall need to evidence compliance (proof of compliance) and identification markings in line with the compliance marks as per the countries' respective compliance mark regulations.

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**II. Specific stipulations**

**1. Subject matter and area of utilization**

**1.1 Subject matter**

Textile fabric made of "Trevira CS"  
as flame-resistant building material (building material category DIN 4102-B1)  
as per building regulation list A, part 2, issue 2015/2 and amendment 2016/1 and amendment  
notification 2016/2, cont. no. 2.10.2.

**1.2 Area of utilization**

- 1.2.1 The textile fabric made of "Trevira CS" may be utilized for vertical slats, Persian blinds, roller blinds and curtains, which are to be fixed as sight or sun protection devices, or as stage curtains.
- 1.2.2 The textile fabric made of "Trevira CS" is flame-resistant, as long as a distance of more than 40mm is adhered to in regard to other two-dimensional building material.
- 1.2.3 The textile fabric made of "Trevira CS" is flame-resistant without additional coating, lining or similar coverings.
- 1.2.4 The textile fabric made of "Trevira CS" may not be exposed to outdoor weather conditions.
- 1.2.5 This general building authority test certificate shall only apply, as far as the requirements as per building regulation list A, part 2, issue 2015/2 and amendment 2016/1 and amendment notification 2016/2, cont. no. 2.10.2 are to be met.
- 1.2.6 The evidencing of additional building authority requirements, such as structural safety, fire resistance, heat and noise insulation or health and safety and the protection of the environment shall not be part of this general building authority test certificate. In this regard, additional/ other evidence may be required (general building authority permit).

**2. Stipulations regarding the building product**

**2.1 Properties and composition**

- 2.1.1 The textile fabric must consist of polyethylene terephthalate with inbuilt fire safety equipment. The mass per unit area in regard to the textile fabric shall need to be between 20g/m<sup>2</sup> and 794 g/m<sup>2</sup>.
- 2.1.2 The composition shall need to be in line with the information stored by the MPA – University of Stuttgart (Otto Graf Institute).

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2.1.3 Testing process

The building product needs to meet the requirements for flame-resistant building materials (building material category B1) as per DIN 4102-1: 1998-05.

2.1.4 (Testing) basis in regard to the issuance of a general building authority test certificate

Name of testing authority	Client	No. of certificates/ test reports/ reports Date	Testing processes/ rules
German institute for building technology, Berlin	Trevira GmbH & Co. KG Frankfurt	Z-PA-III 2.1147 dated 28 <sup>th</sup> May 1999	DIN 4102 part 1 DIN 4102 part 16
MPA – University of Stuttgart Otto Graf Institute	Trevira GmbH Hattersheim	902 7256 000/tcs dated 14 <sup>th</sup> March 2014	DIN 4102 part 1 DIN 4102 part 16
MPA – University of Stuttgart Otto Graf Institute	Trevira GmbH Hattersheim	902 7256 000/bk1 dated 14 <sup>th</sup> March 2014	DIN 4102 part 1 DIN 4102 part 16
MPA – University of Stuttgart Otto Graf Institute	Trevira GmbH Bobingen	Summarized monitoring report 903 3870 000/ZFÜ- 5.138 dated 30 <sup>th</sup> August 2017	DIN 4102 part 1 DIN 4102 part 16

2.1.5 Stipulations regarding the execution of the building product

2.1.5.1 The textile fabric made of "Trevira CS" may be utilized for vertical slats, Persian blinds, roller blinds and curtains, which are to be fixed as sight or sun protection devices, or as stage curtains.

2.1.5.2 The textile fabric made of "Trevira CS" is flame-resistant, as long as a distance of more than 40mm is adhered to in regard to other two-dimensional building material.

2.1.5.3 The textile fabric made of "Trevira CS" is flame-resistant without additional coating, lining or similar coverings.

2.1.5.4 The textile fabric made of "Trevira CS" may not be exposed to outdoor weather conditions.

2.1.5.5 The suitability of the building material for heat and noise insulation purposes has not been tested.

2.1.5.6 Upon production of the building product, the stipulations of paragraph II 2.1 are to be adhered to.

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**2.2 Compliance marks**

The manufacturer is to label the building product with the respective compliance mark as per the countries' compliance mark regulations. The labeling may only be carried out, if the requirements of paragraph 3.1 to 3.3 have been met.

The compliance mark is to be attached to the building product, the packaging (this includes product inserts) or - should this not be possible - the delivery slip.

The following information is to be included on the building product or the respective packaging:

- Product name
- Compliance mark, including:
  - o Name of the manufacturer
  - o Certificate number: P-BWU03-I-16.5.138
  - o Pictograph or name of the certifying authority
- Manufacturing plant
- Building material category flame-resistant (DIN 4102-B1) as per the area of utilization

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**3. Proof of compliance**

**3.1 General information**

The confirmation of compliance of the building product with the stipulations of this general building authority test certificate shall need to be carried out for each manufacturing site, namely by means of a compliance certificate based on internal work production checks, as well as regular third-party audits, including initial inspections of the building product as per the stipulations of this general building authority test certificate.

Regarding the issuance of a compliance certificate, as well as third-party audits, including any product tests to be carried out, the manufacturer of the building product is to involve an authorized certification authority, as well as a recognized auditing organization.

**3.2 Internal factory production checks**

Each manufacturing site is to set up and carry out internal production checks <sup>1)</sup>, where the manufacturer – by means of regular production checks – shall ensure that the building product is in line with the stipulations of this general building authority test certificate. Regarding the execution of internal factory production checks, the “guidelines on evidencing compliance” <sup>2)</sup> shall apply.

The findings of internal factory production checks are to be recorded and evaluated. The records must at least contain the following information:

- Description of the building product
- Type of check
- Date of manufacturing and checking the building product
- Findings in regard to such checks and comparison against the respective requirements
- Signature of the person responsible for the internal factory production check

The records shall be kept for at least five years, and shall be presented to the auditing authority tasked with the respective third-party audit. In case of insufficient test results, the manufacturer shall carry out all necessary measures in order to rectify the respective deficiencies, and any affected products shall be eliminated. As part of internal factory production checks, it is to be ensured that any building products, which are not in line with the requirements, are not marked with the respective compliance mark. Upon rectifying such defaults, the respective tests are to be repeated.

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<sup>1)</sup> Here, the general stipulations of building regulation list A, paragraph 1, 4<sup>th</sup> paragraph, issue 2015/2 (DIBt notifications 6<sup>th</sup> October 2015) shall be taken into account.

<sup>2)</sup> “Guidelines on evidencing compliance in regard to flame-resistant building materials (building material category DIN 4102-B1) as per the general building authority permit” (notifications DIBT 2/1997)



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**3.3 Third-party audits**

Each factory site is to verify its own production checks by means of regular third-party audits, but at least once a year.

Regarding the execution of such audits, the "guidelines on evidencing compliance" <sup>2)</sup> shall apply.

As part of these third-party audits, an initial inspection of the building product is to be carried out. As part of ongoing third-party monitoring activities, samples are to be taken for the purpose of sampling tests. The taking of samples, as well as the respective tests shall be the responsibility of the respective recognized auditing authority.

The results of the certification and third-party audits shall be stored for at least five years. The respective certification authority or auditing authority shall make these available to the responsible building authority upon request.

**4. Legal basis**

This general building authority test certificate has been issued on the basis of art. 17 of the Bavarian building code (BayBO) dated 14<sup>th</sup> August 2007, last amended on 17<sup>th</sup> November 2014, in connection with building regulation list A, part 2, issue 2015/2 and amendment 2016/1 and amendment notification 2016/2. The Federal building codes of the other Federal states contain according legal bases.

**5. Information regarding the right to appeal**

It is possible to submit an appeal against this general building authority test certificate within one month of publication. The appeal is to be submitted to the University of Stuttgart, Keplerstrasse 7, 70174 Stuttgart or P.O. box 106037, 70049 Stuttgart in writing or by declaration.

Fire safety department  
Burning behavior of building materials unit

Administrator  
[Signature]  
Dipl.-Ing. (FH) Gerhard Müller

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Head of the testing authority  
[Signature]  
Dr. Stefan Lehner, Executive  
Academic Director

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2) "Guidelines on evidencing compliance in regard to flame-resistant building materials (building material category DIN 4102-B1) as per the general building authority permit" (notifications DIBT 2/1997)

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I, Robert Avery Grey, sworn German-English translator by the Frankfurt Regional Court, hereby certify that the above translation from the original document is accurate and complete.

Frankfurt am Main, Germany, 4<sup>th</sup> September 2017

