

General Building Inspectorate Approval

Approval number:

P-BWU03-I-16-5-138

Approval object:

Textile fabric made of "TREVIRA CS"
as a hardly inflammable building material (Building Material Class DIN 4102-B1)

Applicant:

Trevira GmbH
Philipp-Reis- Strasse 2
65795 Hattersheim

Date of issue:

1st August 2007

Period of validity until:

31st August 2012

On account of this General Building Inspectorate Approval, the object mentioned hereinbefore shall be used in keeping with the State building regulations.

The General Building Inspectorate Approval comprises six pages and zero enclosures.

This General Building Inspectorate Approval shall replace the General Building Inspectorate Approval P-BWU03-I-16-5-138 dated 20th September 2002. A proof of suitability was issued for the object for the first time on 22nd October 1979. The venue and place of fulfilment shall be Stuttgart.

A proof of approval accredited by DAP Deutsches Akkreditierungssystem Prüfwaren GmbH in keeping with DIN EN ISO/IEC 17025. The accreditation shall apply for the testing procedures (DAP Reg. No.: DAP-PL-2907.89) indicated in the documents. Additional accreditations in keeping with DIN EN ISO/IEC 17025 by DKD / PTB, KBA, ZLS and certification in keeping with DIN EN ISO 9001:2000. Testing, Monitoring and Certification Body PÜZ recognised by the DIBT, body 0672 and 1080 notified by the EU.

MPA – University of Stuttgart – Pfaffenwaldring 4 – 70559 Stuttgart

<http://www.mpa.uni-stuttgart.de>

University of Stuttgart
[Coat of arms]
Materials Testing Institute

(I) General Provisions

- (1) The General Building Inspectorate Approval proves the usability or applicability, respectively, of the approval object in keeping with the building regulations of the Land.
- (2) The General Building Inspectorate Approval shall not take the place of the licences, approvals and certificates legally required for the execution of a building project.
- (3) The General Building Inspectorate Approval shall be given without prejudice to the rights of third parties, in particular private protected privileges.
- (4) Without prejudice to the stipulations in the "Special Provisions", the manufacturer and seller of the approval object shall render available to the user or applier, respectively, of the approval object copies of the General Building Inspectorate Approval, and shall point out that the General Building Inspectorate Approval shall have to be available at the site of use. Upon request, the General Building Inspectorate Approval shall have to be rendered available to the authorities concerned.
- (5) The General Building Inspectorate Approval shall be reproduced in whole only. An extract reproduction shall require the approval of the German Institute for Structural Engineering. Texts and drawings of advertising media shall not be inconsistent with the General Building Inspectorate Approval. Translations of the General Building Inspectorate Approval shall have to contain the following notice: "Translation of the German original not verified by the German Institute for Structural Engineering".
- (6) The General Building Inspectorate Approval shall be awarded until revoked. The provisions of the General Building Inspectorate Approval may be supplemented and modified subsequently, in particular, if new technical knowledge requires such action.

[Coat of arms]
German Institute for
Structural Engineering

(II) Special Provisions

(1) Approval object and field of application

1.1 Approval object

The General Building Inspectorate Approval shall apply for the manufacture and use of textile fabric made of polyethylenterephthalate, also referred to as "TREVIRA CS", as a hardly inflammable building material (Building Material Class DIN 4102-B1) in keeping with standard DIN 4102-1¹.

1.2 Field of application

1.2.1 The textile fabric may be used for lamellar curtains, folding shutters and blinds as a means of sun protection and for stage curtains, which have to be firmly installed.

1.2.2 A distance of > 40 mm to the same or other large-area building materials shall have to be observed.

1.2.3 The textile fabric shall not be subjected to weather conditions in the open air.

(2) Provisions for the structural product

2.1 Properties and composition

2.1.1 The textile fabric shall have to be manufactured with flammability retardant installed. The fabric weight shall have to amount to 40 g/sqm to 700 g/sqm.

2.1.2 The textile fabric shall have to meet the requirements on hardly inflammable building materials (Building Material Class DIN 4102-B1) in keeping with standard DIN 4102-1¹, chapter 6.1, and in keeping with the approval principles².

2.1.3 The composition of the textile fabric shall have to meet the data for individual building materials filed with the German Institute for Structural Engineering.

2.2 Manufacture and conformity

2.2.1 Manufacture

The provisions of chapter 2.1 shall have to be observed in the manufacture of the textile fabric.

2.2.2 Conformity

The textile fabric, the packaging or the package insert shall have to be marked by the manufacturer with the mark of conformity (C mark) in compliance with the Mark of Conformity Regulations of the Lander. The marking shall be carried out only, if the pre-requisites in keeping with chapter 2.3 have been met.

[Coat of arms]
German Institute for
Structural Engineering

1 DIN 4102-1: Fire behaviour of building materials and building components; building materials: terms, requirements, and tests (issued May 1981) – sections 3 and 5.

2 The approval principles for the proof of hard inflammability of building materials (as amended in August 1994) have been published in the "Information Bulletin" of the German Institute for Structural Engineering, Special Edition 9/1994.

The following data shall have to be attached to the fabric, the packaging or the package insert:

- product name
- mark of conformity (C mark) with
 - name of the manufacturer
 - approval number: Z-PA-III 2.1147
 - figurative trademark or designation of the certification body
- manufacturing works
- building material class – hardly inflammable (DIN 4102-B1)

2.3 Proof of conformity

The affirmation of conformity of the building product with the provisions of this General Building Inspectorate Approval shall have to be established for each manufactured product by means of a conformity certificate on the basis of an in-company production control and a regular out-of-company control inclusive of an initial test of the building product in keeping with the following provisions. For the issue of the conformity certificate and the out-of-company control inclusive of the product test to be carried out, the manufacturer of the building product shall have to commission an appointed certification body as well as an appointed control body. The German Institute for Structural Engineering shall receive from the certification body a copy of the conformity certificate for reference.

2.3.2 In-company production control

An in-company production control shall have to be set up and carried out in every manufacturing works. In-company production control shall be understood to be the control of the production carried out by the manufacturer in regular intervals, in which the said ensures that the building products produced correspond to the provisions of this General Building Inspectorate Approval.

For the performance of the in-company production control the "Guidelines on the Proof of Conformity of Hardly Inflammable Building Materials (Building Material Class DIN 4102-B1) in Keeping with the General Building Inspectorate Approval"³ shall be applicable.

The results of the in-company production control shall have to be recorded and evaluated. The records shall contain the following data as a minimum:

- designation of the building material and/or the basic material and the components
- type of control or test
- date of manufacture and test of the building product or of the basic material or the components
- results of the controls and tests, and if and when applicable, a comparison with the requirements
- signature of the person responsible for the in-company production control

The records shall have to be archived for at least five years and shall have to be presented to the control body commissioned with the out-of-company control. Upon request the said shall be presented to the German Institute for Structural Engineering and the competent Supreme Building Inspectorate.

If the test results are insufficient, the manufacturer shall have to take the necessary measures immediately to remove the defects. Building products, which do not meet the requirements, shall have to be handled in such a way that they cannot be mistaken for the products that meet the requirements. If and when technically possible and required to prove the defect removal – the respective test shall have to be repeated immediately after the defect has been removed.

3 The "Guidelines on the Proof of Conformity of Hardly Inflammable Building Materials (Building Material Class DIN 4102-B1) in Keeping with the General Building Inspectorate Approval" have been published in the "Information Bulletin" of the German Institute for Structural Engineering on 1st April 1997.

2.3.3 Out-of-company control

In every manufacturing works, the in-company manufacture control shall have to be verified by an out-of-company inspection in regular intervals, at least, however, once a year. For the performance of the control the "Guidelines on the Proof of Conformity of Hardly Inflammable Building Materials (Building Material Class DIN 4102-B1) in Keeping with the General Building Inspectorate Approval"³ and the approval principles² shall be applicable. Within the framework of the out-of-company control, an initial test of the building product shall have to be carried out and samples may also be taken for spot checking. The sampling and test shall be carried out by the competent control body.

The results of the certification and of the out-of-company control shall have to be archived for at least five years. Upon request, they shall have to be presented to the German Institute for Structural Engineering and the competent Supreme Building Inspectorate by the certification body or the control body, respectively.

(3) Provisions for the assessment

When used as lamellar curtains, folding shutters and blinds as a sun protection, the standard DIN 4108-2⁴, Table 5, shall have to be observed.

(4) Provisions for the implementation

- 4.1 A distance of > 40 mm to the same or other large-area building materials shall have to be observed.
- 4.2 The textile fabric shall not be subjected to weather conditions in the open air.

ppa.
Herzog

[Coat of arms]
German Institute for
Structural Engineering

End of Translation

Explanation: Text in [...] was added by the translator for explanation and/or indication.

In my capacity as public translator for the English language, duly commissioned and sworn in in Bavaria, Germany, I hereby certify:
The translation hereinbefore of the German copy submitted to me is exact and complete.

Benediktbeuern

26 NOV 2007



A handwritten signature in black ink, appearing to read "R. Wiles".

(R. Wiles)
Reg. No. 07 11 2712/EN
Copy 1 of 1