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Member of EOTA

European Technical Approval ETA-10/0251

English translation prepared by DIBt - Original version in German language

Handelsbezeichnung

Trade name

VIASAN

Zulassungsinhaber

Holder of approval

VIA DACHTEILE GmbH & Co. KG Bramfelder Chaussee 100

Flüssig aufzubringendes Dachabdichtungssystem auf der

Liquid applied roof waterproofing system on the basis of plyurethan

22177 Hamburg **DEUTSCHLAND**

Basis von Polyurethan

Zulassungsgegenstand und Verwendungszweck

Generic type and use of construction product

Geltungsdauer: vom

bis

Validity: from

12 July 2010

11 July 2015

Herstellwerk

Manufacturing plant

VIA DACHTEILE GmbH & Co. KG

Hauptlager

Diese Zulassung umfasst This Approval contains

9 Seiten einschließlich 2 Anhänge

9 pages including 2 annexes



I LEGAL BASES AND GENERAL CONDITIONS

- 1 This European technical approval is issued by Deutsches Institut für Bautechnik in accordance with:
 - Council Directive 89/106/EEC of 21 December 1988 on the approximation of laws, regulations and administrative provisions of Member States relating to construction products¹, modified by Council Directive 93/68/EEC² and Regulation (EC) N° 1882/2003 of the European Parliament and of the Council³:
 - Gesetz über das In-Verkehr-Bringen von und den freien Warenverkehr mit Bauprodukten zur Umsetzung der Richtlinie 89/106/EWG des Rates vom 21. Dezember 1988 zur Angleichung der Rechts- und Verwaltungsvorschriften der Mitgliedstaaten über Bauprodukte und anderer Rechtsakte der Europäischen Gemeinschaften (Bauproduktengesetz - BauPG) vom 28. April 1998⁴, as amended by law of 31 October 2006⁵;
 - Common Procedural Rules for Requesting, Preparing and the Granting of European technical approvals set out in the Annex to Commission Decision 94/23/EC⁶;
 - Guideline for European technical approval of "Liquid applied roof waterproofing kits Part 6: Specific stipulations for kits based on polyurethane", ETAG 005-06.
- Deutsches Institut für Bautechnik is authorized to check whether the provisions of this European technical approval are met. Checking may take place in the manufacturing plant. Nevertheless, the responsibility for the conformity of the products to the European technical approval and for their fitness for the intended use remains with the holder of the European technical approval.
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¹ Official Journal of the European Communities L 40, 11 February 1989, p. 12

² Official Journal of the European Communities L 220, 30 August 1993, p. 1

³ Official Journal of the European Union L 284, 31 October 2003, p. 25

⁴ Bundesgesetzblatt Teil I 1998, p. 812

⁵ Bundesgesetzblatt Teil I 2006, p.2407, 2416

⁶ Official Journal of the European Communities L 17, 20 January 1994, p. 34

II SPECIFIC CONDITIONS OF THE EUROPEAN TECHNICAL APPROVAL

1 Definition of product and intended use

1.1 Definition of the construction product

The liquid applied roof waterproofing system "VIASAN" is a kit. The kit consists of the components:

- supporting layer: roof waterproofing sheet VIA-UP 3 mm according EN 13707, clutched on upper side with polyester fleece with a weight of approx. 180 g/m²
- cover layer: liquid applied roof waterproofing on the basis of a two component polyurethane "QuiTex DA" according ETA-07/0080 with a thickness of 0,5 mm (1,5 kg/m²)
- stripes of polyester fleece according ETA-07/0080 for reinforcement the joints of the sheets with a width of 15 cm

For an adequate adhesion of the waterproofing layer – depending on the type of substrate – a primer on the basis of bitumen is required.

As an assembled system these components form a seamless roof waterproofing.

The sheet "VIA UP 3" is CE-marked according EN 13707⁷. The liquid applied roof waterproofing "QuiTex DA" including the stripes of polyester fleece is CE-marked according ETA-07/0080. These components are accompagnied by declarations of conformity on basis of these harmonised technical specifications.

Annex 1 shows the components and the system build-up of the roof waterproofing sytem "VIASAN".

The minimum layer thickness of the roof waterproofing system "VIASAN" applied is 3,5 mm.

1.2 Intended use

The kit is used for the waterproofing of roof surfaces against penetration of atmospheric water. The kit shows certain levels of performance according to ETAG 005 which facilitate the use taking account of national requirements (see chapter 2.1).

In the manufacturer's technical dossier⁸ (MTD) to this European technical approval (ETA) the manufacturer give information concerning the substrates which the product is suitable for and on how these substrates shall be pre-treated.

The verifications which are the basis of this ETA give reason for the assumption of an intended working life of the roof waterproofing of 25 years⁹, provided that the roof waterproofing kit is subject to appropriate installation, use and maintenance. These provisions are based upon the current state of the art and the available knowledge and experience.

The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

⁷ EN 13707:2004: "Flexible sheets for waterproofing - Reinforced bitumen sheets for roof waterproofing - Definitions and characteristics"

The manufacturer's technical dossier (MTD) comprises all information necessary for the production and the installation of the product as well as for the repair of the roof waterproofing made from that and it is deposited with DIBt. It was checked by DIBt and it was found to be in accordance with the conditions stated in the approval and the characteristic values determined during the approval testing.

[&]quot;Assumed intended working life" means that it is expected that, when this working life has elapsed, the real working life may, under normal use conditions, be considerably longer without major degradation affecting the essential requirements.

2 Characteristics of the construction product and methods of verification

2.1 Characteristics of the construction

The components of the kit show the characteristic values with respect to the permissible tolerances which are stated in the MTD to this ETA.

The chemical composition and the characteristic values of the components of the kit and the manufacturing methods are confidential and deposited with DIBt.

Requirements concerning safety in case of fire, health and the environment and safety in use as well as durability in the sense of the essential requirements N° 2 to N° 4 of the Directive 89/106/EEC will be satisfied.

The verified property values of the kit lead to certain levels of use categories according to ETAG 005. They are stated in Annex 1. An evaluation oriented at the intended use of the product can be carried out with them by the user.

The performance of the reaction to fire behavior of the liquid applied roof waterproofing system leads to the classification in class E according to EN 13501-110.

The classification of the external fire performance of the liquid applied roof waterproofing system according to EN 13501- 5^{11} is in class $B_{ROOF}(t1)$. The roof systems are described in Annex 2.

According to the manufacturer's declaration the roof waterproofing system taking account of the EU database¹² does not contain any dangerous substances.

Within the scope of this approval there may be other requirements applicable to dangerous substances resulting from transposed European legislation or applicable national laws, regulations and administrative provisions.

There may be other requirements applicable to the kits resulting from other applicable national laws, regulations and administrative provisions and transposed European legislation.

These requirements need also to be complied with, when and where they apply.

2.2 Methods of verification

Assessment of the fitness of the roof waterproofing system for the intended use with regard to the essential requirements N° 2 to N° 4 was performed following the "Guideline for European technical approval of liquid applied roof waterproofing kits", Part 1 "General" and Part 6 "Specific stipulations for kits based on polyurethane" (ETAG 005-01/-06).

3 Evaluation and attestation of conformity and CE marking

3.1 System of attestation of conformity

The European Commission according to her decision 98/599/EC13 on the procedure of attestation of conformity has laid down for this type of material system 3 for the procedure of attestation of conformity (AoC) (Annex III, clause 2(ii) second possibility of Directive 89/106/EEC) for liquid applied roof waterproofing kits. According to this decision system 3 of attestation of conformity also applies with regard to external fire performance.

EN 13501-1:2007 "Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests"

EN 13501-5:2005 "Fire classification of construction products and building elements - Part 5: Classification using data from external fire exposure to roofs tests

Notes are stated in Guidance Paper H: "A harmonized approach relating to dangerous substances under the Construction Products Directive", Brussels, 18 February 2000

Official Journal of the European Communities N°L 287 of 24 October 1998

In addition, according to the Decision 2001/596/EC of the European Commission¹⁴ the system 3 of attestation of conformity applies for this type of kit with regard to reaction to fire.

The system 3 of attestation of conformity is defined as follows:

System 3: Declaration of conformity of the kit by the manufacturer on the basis of:

- Tasks for the manufacturer:
 - (1) factory production control,
- b) Tasks for the notified body:
 - (2) initial type-testing of the product.

3.2 Responsibilities

For the components are provided that the attestation of conformity processes according to EN 13707 respectively to the relevant ETA are verified on basis of these technical specifications. The attestation of conformity is only related to assemble the components to the kit according Annex 1 and shall be documented by the declaration of conformity and the CE marking of the kit by the manufacturer according to clause 3.3.

3.2.1 Tasks for the manufacturer

3.2.1.1 Factory production control

The factory production control shall be in accordance with the appropriate part of the control plan¹⁵ and is related to the control of incoming products and to assemble the components. The manufacturer may only use initial materials according to the MTD.

The results of factory production control shall be recorded and evaluated in accordance with the provisions of the control plan.

The records shall include at least the following information:

- Name of the product and of the initial materials,
- type of inspection or control,
- date of manufacture of the product, batch N° if needed, and date of inspection or control
 of the product or of the initial materials,
- result of inspections or controls and, as far as applicable, comparison with the requirements,
- signature of the person responsible for the factory production control.

The records shall be kept for at least five years. On request they shall be presented to DIBt.

Details concerning extent, type and frequency of the tests or inspections to be performed within the scope of the factory production control shall correspond to the control plan which is part of the MTD to this ETA.

3.2.1.2 Other tasks for the manufacturer

The manufacturer shall make a declaration of conformity, stating that the construction product is in conformity with the provisions of this ETA.

3.2.2 Tasks for notified body

3.2.2.1 Initial type-testing of the product

Due to the fact that all components are still CE-marked no initial type-testing of the kit is required.

Official Journal of the European Communities N°L 209/33 of 2 August 2001

The control plan is a confidential part of the MTD and deposited with DIBt. It contains the required information on the factory production control and on the initial type-testing. The MTD is only handed over to the notified body involved in the procedure of attestation of conformity (see 3.2.2).

3.3 CE marking

The CE marking¹⁶ shall be affixed on the packaging of the kit of the roof waterproofing system "VIASAN" or its accompanying documents.

The letters "CE" shall be accompanied by the following additional information:

- name and address or identifying mark of the manufacturer,
- last two digits of the year in which the CE marking was affixed,
- number of the European technical approval,
- number of the European technical approval guideline,
- short definition of the levels of performance according to Annex 1.

The components shall be marked as belonging to the kit "VIASAN".

4 Assumptions under which the fitness of the product for the intended use was favourably assessed

4.1 Manufacturing

The ETA is issued for the kit on the basis of agreed data/information deposited with DIBt. Changes to the components of the kit, which could result that the properties of the product deposited being incorrect should be notified to DIBt before the changes are introduced. DIBt will decide whether or not such changes affect the ETA and consequently the validity of the CE marking on the basis of the ETA and if so whether further assessment/alterations to the ETA shall be necessary.

4.2 Design and dimensioning

The fitness for the respective use of the roof waterproofing system results from the levels of use categories stated in Annex 1, if need be, taking account of national requirements.

The supplementing statements of the manufacturer stated in the MTD for design and dimensioning of the roof waterproofing system shall be considered.

In the MTD the manufacturer gave information on the quantities consumed and the processing, which shall lead to a thickness of the roof waterproofing system of at least 3,5 mm.

4.3 Installation

The fitness for use of the roof waterproofing system can be assumed only, if the installation is carried out according to the installation instructions stated in the MTD by the manufacturer, in particular taking account of the following points:

- Installation by appropriately trained personnel,
- installation of only those components which are marked components of the kit,
- installation with the required tools and adjuvants,
- precautions during installation,
- inspecting the roof surface for cleanliness and correct preparation, if need be, applying a primer before applying the product,
- inspecting compliance with suitable weather and curing conditions,
- ensuring a thickness of the waterproofing system of at least 3,5 mm by processing appropriate minimum quantities of material,

Notes on the CE marking are stated in Guidance Paper D: "CE marking under the Construction Products Directive", Brussels, 1 August 2002

- inspections during installation and of the finished product and documentation of the results.

The information as to the

- method of repair on site,
- handling of waste products

shall be observed.

4.4 Manufacturer's responsibilities

It is the manufacturer's responsibility to make sure that all those who utilize the kit will be appropriately informed about the specific conditions according to sections 1, 2, 4, and 5 including the annex to this ETA and the not confidential parts of the MTD deposited to this ETA.

5 Indications by the manufacturer

5.1 Packaging, transport and storage

Information on:

- Packaging
- transport and
- storage

are given in the MTD.

5.2 Use, maintenance, repair

Information on:

- Use
- maintenance
- repair

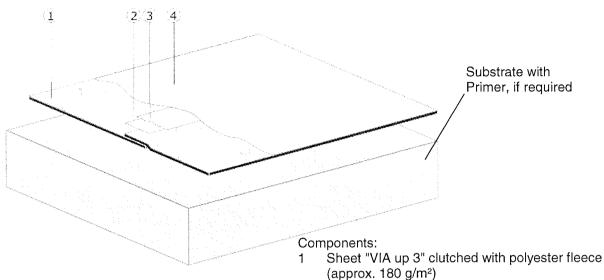
are given in the MTD.

Dipl.-Ing. U. Bender Deutsches Institut für Bautechnik Berlin, 12 July 2010 *beglaubigt:* Hemme

8 06 05-192/07

DEUTSCHES INSTITUT FÜR BAUTECHNIK

System build-up of the roof waterproofing system "VIASAN"



- 2 Stripes of polyester fleece
- 3 Liquid synthetic material "QuiTex DA" (0,45 g/m²) over joints
- 4 Liquid synthetic material "QuiTex DA" (1,5 g/m²)

Applicable to the roof waterproofing system "VIASAN":

Minimum layer thickness: sheet 3,0 mm

liquid synthetic material 0,5 mm (minimum quantity consumed: 1,5 kg/m²)

system 3,5 mm

Water vapour diffusion resistance factor μ \approx 240000 (at 0 % to 75 % r.h.)

Characteristic wind uplift resistance ≥ 2500 N/m²

External fire performance EN 13501-5 class B_{ROOF} (t1)

Reaction to fire EN 13501-1 class E Statement on dangerous substances does not contain any

Resistance to plant roots no performance determined Resistance to slipperiness no performance determined

Levels of use categories according to ETAG 005 with relation to:

Working life: W3

Climatic zones: M (Moderate)

Imposed loads: P1 to P3 (non-compressible substrate, e.g. concrete/steel)

P1 to P3 (compressible substrate, e.g. foam plate)

Roof slope: S1 to S4
Lowest surface temperature: TL3 (-20 °C)
Highest surface temperature: TH4 (90 °C)

VIA-DACHTEILE GmbH & Co.KG

Bramfelder Chaussee 100 22177 Hamburg

Germany

Roof waterproofing system

VIASAN

Liquid applied roof waterproofing on the basis of polyurethane

Annex 1

to European technical approval ETA-10/0251 dated 12 July 2010

DEUTSCHES INSTITUT FÜR BAUTECHNIK

Classification of the external fire performance according EN 13501-5 for the following supporting decks for the roof waterproofing "VIASAN"

Class B_{ROOF} (t1)

The classification is valid for the following supporting decks:

- for roof pitches < 20°
- any wooden continuous deck with a minimum thickness of 16 mm and with gaps not exceeding 0.5 mm
- any non-combustible continuous deck with a minimum thickness of 10 mm
- with EPS DAA (EN 13163) clutched with GVK100 with a thickness of 100 mm
- any other roof system for which classification documents for BROOF (t1) according to EN 13501-5 are available.

VIA-DACHTEILE GmbH & Co.KG

Bramfelder Chaussee 100 22177 Hamburg Germany

Roof waterproofing system VIASAN

Liquid applied roof waterproofing on the basis of polyurethane

Annex 2

to European technical approval ETA-10/0251 dated 12 July 2010