

European Technical Approval**ETA 07/0024**

Trade Name	TEKNOTAN DETAIL
Holder of the approval	Asphaltco NV d'Herbouvillekaai 80 B - 2020 Antwerpen
Website	www.asphaltco.be
Generic type and use of construction product	Liquid applied waterproofing systems on the basis of polyurethane
Validity from:	11/09/2012
to	10/09/2017
Manufacturing plant(s):	ASPHALTCO NV D'Herbouvillekaai 80 B 2020 Antwerpen
This European Technical Approval contains:	5 pages including 1 annex which form an integral part of the document
This version replaces:	ETA 07/0024, valid from 24/08/2011 until 28/02/2012



European Organisation for Technical Approvals
Organisation Européenne pour l'Agrément Technique
Europäische Organisation für Technische Zulassungen

I. LEGAL BASES AND GENERAL CONDITIONS

- 1 This European Technical Approval is issued by UBAtc – UBAtc 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,
 - Belgian law of 25 March 1996 concerning the adaptation of legislative and administrative provisions of Member States to the Construction Products Directive (89/106/EEC) for construction products⁴ and Belgian Royal Decree of 18 August 1998 concerning construction products⁵
 - 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 for liquid applied roof waterproofing kits, ETA-Guideline Nr 005⁷, revision March 2004, Part 1: "General" and Part 6: "Specific stipulations for kits based on polyurethane".
- 2 The UBAtc is authorized to check whether the provisions of this European Technical Approval are met. Checking may take place in the manufacturing plant(s). 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.
- 3 This European Technical Approval is not to be transferred to manufacturers or agents of manufacturers other than those indicated on page 1, or manufacturing plants other than those laid down in the context of this European Technical Approval.
- 4 This European Technical Approval may be withdrawn by UBAtc, in particular pursuant to information by the Commission according to Article 5(1) of Council Directive 89/106/EEC.
- 5 Reproduction of this European Technical Approval including transmission by electronic means shall be in full. However, partial reproduction can be made with the written consent of UBAtc. In this case partial reproduction has to be designated as such. Texts and drawings of advertising brochures shall not contradict or misuse the European Technical Approval.
- 6 The European Technical Approval is issued by the approval body in its official languages. These versions correspond fully to the version circulated in EOTA. Translations into other languages have to be designated as such.
- 7 Compared with the original version, in the version issued on 24/08/2011 the address of the ETA-holder and the trade names of the product and of one of its supporting components changed. This version comprises no modifications in comparison with the previous version of this European Technical Approval issued on 24/08/2011.

¹ Official Journal of the European Communities N° L 40, 11.2.1989, p. 12

² Official Journal of the European Communities N° L 220, 30.8.1993, p. 1

³ Official Journal of the European Union N° L 284, 31.10.2003, p. 1

⁴ Belgian Law Gazette, 21.05.1996

⁵ Belgian Law Gazette, 11.09.1998

⁶ Official Journal of the European Communities N° L 17, 20.1.1994, p. 34

⁷ Official Journal of the European Communities N° C 212/02, 06.09.2002

II. SPECIFIC CONDITIONS OF THE EUROPEAN TECHNICAL APPROVAL

1. Definition of product and intended use

1.1 Definition of product

The liquid applied roof waterproofing "TEKNOTAN DETAIL" is a kit which consists of liquid synthetic material of moisture reactive polyurethane one component reinforced with fibres. Specific substrates require a primer (TEKNOPRIMER or IKOpro TEKNOPRIMER DETAIL) for an adequate adhesion of the waterproofing layer. As assembled system these components form a homogeneous seamless roof waterproofing.

A reinforcement TEKNOSTRIP may be foreseen. The waterproofing system can be protected by a finishing layer, consisting of imbedded quartz granules.

The minimum layer thickness of the roof waterproofing applied amounts to 1,0 mm.

1.2 Intended use

The liquid applied roof waterproofing for the waterproofing of roof surfaces against penetration of atmospheric water is intended for uses where requirements concerning safety in case of fire, hygiene, health and the environment and safety in use as well as the durability in the sense of the essential requirements N° 2 to N° 4 of the Directive 89/106/EEC shall be satisfied.

The liquid waterproofing may be used on roofs with non compressible substrate.

The roof waterproofing shows certain levels of performance according to ETAG 005⁸ which facilitate the use taking account of national requirements (see chapter 2.1).

In the manufacturer's technical dossier⁹ (MTD) to this European technical approval (ETA) the manufacturer gave information concerning the substrates which the roof waterproofing is suitable for and on how these substrates shall be pre-treated. It is also stipulated in the MTD for which substrates a primer is necessary.

The verifications which are based on this ETA give reason for the assumption of an intended working life of the roof waterproofing of 10 years.

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.

⁸ "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), publication of March 2004.

ETAG 005, "Liquid applied roof waterproofing kits", Official Journal of the European Communities N° C 212/02, 06 September 2002

⁹ The manufacturer's technical dossier (MTD) comprises all information necessary for the production and the processing of the product as well as for the repair of the roof waterproofing made from that. It was checked by BUtgb - UBAtc and it was found to be in accordance with the conditions stated in the approval and the characteristic values determined during the approval testing.

The part of the technical dossier to this European technical approval to be treated confidentially (inter alia the test plan for factory production control) is deposited with BUtgb - UBAtc and, as far as this is relevant to the tasks of the approved body involved in the procedure of attestation of conformity shall be handed over to the approved body.

1.3 Working Life

The provisions made in this ETA are based on an assumed working life of the waterproofing system of 10 years (W2).

The indications given on the working life cannot be interpreted as a guarantee given by the manufacturer, but are to be used as a means for selecting the appropriate products in relation to the expected economically reasonable working life of the works.

2 Characteristics of product and methods of verification

2.1 Characteristics of the product

The waterproofing system has the characteristic presented in annex 1 to this ETA.

The components of the roof waterproofing 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 property values of the components of the kit and the manufacturing methods are confidential and deposited with BUTgb - UBAtc.

The performance of the reaction to fire behaviour of the product leads to the classification in class F according to EN 13501-1.

The performance of the external fire performance leads to the classification in class B_{ROOF}(t1) on wood according to EN 13501-5.

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

2.2 Methods of verification

Assessment of the fitness of the roof waterproofing 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)⁸.

The products comply with all relevant European and national provisions¹⁰ applicable for the uses for which they are brought to the market. In addition to this ETA clause relating to dangerous substances, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the EU Construction Products Directive, these requirements need also to be complied with, when and where they apply.

3 Attestation of conformity of the product and CE marking

3.1 System of attestation of conformity

According to the decision 98/599/EC of October 1998 of the European Commission¹¹ the system 3 of attestation of conformity (Annex III, clause 2(ii) of Directive 89/106/EEC) applies.

This attestation of conformity system AoC 3 distinguishes the followings tasks:

- Tasks for the manufacturer: Factory Production Control (FPC)
- Tasks for the approved body: Initial Type-Testing (ITT) of the product.

3.2 Responsibility

3.2.1 Tasks of the manufacturer

3.2.1.1 Factory Production Control

The manufacturer shall set up a production control at his factory and perform regular controls of the production process according to the prescribed test plan¹². This ensures that the product shows the properties stated in this ETA.

The manufacturer may only use the materials and components specified in the MTD. He shall inspect and/or control the raw materials on acceptance according to the prescribed test plan.

The results of the factory production control shall be recorded and evaluated. The records shall include at least the following information:

- designation of the material (name of the product and of the raw materials)
- type of control or testing
- date of manufacture of the product, batch number if required, and date of control or testing
- result of control or testing and, if applicable, comparison with the requirements
- signature of the person responsible for the factory production control.

The records shall be kept for at least 10 years after the last date of production. On request they shall be presented to BUTgb - UBAtc.

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 prescribed test plan⁸ which is part of the MTD to this ETA.

The manufacturing and quality control procedures are confidential and deposited with BUTgb - UBAtc.

All weighing, measuring and testing equipment shall be calibrated and regularly inspected according to documented procedures, frequencies and criteria.

¹¹ Official Journal of the European Communities N° L 287, 24.10.1998

¹² The test plan is deposited with BUTgb - UBAtc and contains the required information on the factory production control and on the initial type-testing. As far as this is relevant to the tasks of the approved body involved in the procedure of attestation of conformity the test plan will be handed over to the approved body.

¹⁰ Known at date of issuing

The specifications of all incoming raw materials and components shall be documented, as shall the inspection scheme for ensuring their conformity.

In the event of any non-conformity of any product, that product shall be placed into quarantine and action taken to rectify the cause of the non-conformity. Products may not subsequently be dispatched until the problem has been resolved.

3.2.2 Tasks of the Approved Body

3.2.2.1 Initial type-testing of the product

For initial type-testing, the results of the tests performed as part of the assessment for the ETA may be used unless there are changes in the manufacturing procedure that will affect the properties.

Additional initial type-testing may be necessary, e.g. when starting a new production line.

3.3 CE-marking

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

According to Council Directive 93/68/EEC¹³ the CE marking consists of the letters "CE" in the form laid down in the Directive. The CE marking symbol and the accompanying information shall be shown on the packaging and/or on the accompanying commercial documents.

The CE symbol shall be accompanied by the following information:

- identification of the product
- name and address or identifying mark of manufacturer and factory
- the last two digits of the year in which the CE marking was affixed
- Reference to the ETA-Guideline
- number of the European technical approval



Figure 1: Example of CE marking and accompanying information

4 Assumptions under which the fitness for use of the product is given

4.1 Manufacturing

The components of the kit of the waterproofing are factory-made according to the procedure laid down in the MTD.

The ETA is issued for the kit on the basis of the product composition deposited with BUTgb - UBAtc. Changes to the components of the kit or in the production process of the components, which could result in the production process and/or the properties of the product deposited being incorrect should be notified to BUTgb - UBAtc before the changes are introduced.

BUTgb - UBAtc 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

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

In the MTD the manufacturer gave information on the quantities consumed and the processing methods which shall lead to the required thickness of the roof waterproofing of at least 1.0 mm.

4.3 Processing

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

- Processing by appropriately trained personnel,
- processing of only those components which are a marked component of the kit,
- processing with the required tools and adjuvants,
- precautions during processing,
- inspecting the roof surface for cleanliness and correct preparation and, if need be, applying a primer before applying the roof waterproofing,
- inspecting compliance with suitable weather and curing conditions,
- finding out whether to the given ambient temperature the application with the adjustment for summer or winter is to be accomplished,
- ensuring a thickness of the waterproofing of at least 1,0 mm by processing of appropriate minimum quantities of material,
- inspections during installation and of the finished roof waterproofing and documentation of the results.

The information as to

- methods 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 use 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 to this ETA.

¹³ Official Journal of the European Communities L 220 of 30.8.1993

5 Information by the manufacturer

5.1 Information on packaging, transportation and storage

Information on:

- Packaging
- transportation
- storage

are given in the MTD.

5.2 Information on use, maintenance and repair

Information on:

- Use
- maintenance
- repair

are given in the MTD.

Annex I System build-up of the roof waterproofing 'TEKNOTAN DETAIL'

Components:

- 1 Primer (where required) TEKNOPRIMER or IKOpro TEKNOPRIMER DETAIL
- 2 Eventual reinforcement TEKNOSTRIP
- 3 Liquid synthetic material in 1 mm minimum
- 4 One of the finishings as listed in this ETA

Applicable to the roof waterproofing "TEKNOTAN DETAIL":

- Minimum layer thickness 1.0 mm
- Water vapour diffusion resistance factor $\mu \approx 8842$
- Resistance to wind loads ≥ 50 kPa for substrates with tear resistance ≥ 50 kPa
- Resistance to spreading fire and radiant heat class $B_{ROOF}(t1)$ on finishings on wood, $F_{ROOF}(t1)$ for all other finishings
- Reaction to fire class F (no performance determined)
- Statement on dangerous substances does not contain any
- Resistance to slipperiness no performance determined

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

- Working life: W2
- Climatic zones: M
- Imposed loads: P1 (non-compressible substrate, e.g. concrete)

-	Roof slope: S1 to S4
-	Lowest surface temperature: TL2
-	Highest surface temperature: TH3
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