Deutsches Institut für Bautechnik
Zulassungsstelle für Bauprodukte und Bauarten
Bautechnisches Prüfamt
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Authorised and notified according to Article 10 of the Council Directive of 21 December 1988 on the approximation of laws, regulations and administrative provisions of Member States relating to construction products (89/106/EEC)

Deutsches Institut für Bautechnik
DIBt

Mitglied der EOTA
Member of EOTA

European Technical Approval ETA-13/0081

English translation prepared by DIBt - Original version in German language

Handelsbezeichnung *Trade name*		Inopaz H2O
Zulassungsinhaber *Holder of approval*		Pazkar Ltd Alon Tavor Industrial Zone 18000 AFULA ISRAEL
Zulassungsgegenstand und Verwendungszweck *Generic type and use of construction product*		Flüssig aufzubringende Dachabdichtung auf der Basis von Polyurethan *Liquid applied roof waterproofing on the basis of polyurethane*
Geltungsdauer: *Validity:*	vom *from* bis *to*	14 March 2013 14 March 2018
Herstellwerk *Manufacturing plant*		Pazkar Ltd Alon Tavor Industrial Zone 18000 AFULA ISRAEL

Diese Zulassung umfasst *This Approval contains*	8 Seiten einschließlich 1 Anhang *8 pages including 1 annex*

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 products[1], modified by Council Directive 93/68/EEC[2] and Regulation (EC) N° 1882/2003 of the European Parliament and of the Council[3];
- *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 1998[4], as amended by Article 2 of the law of 8 November 2011[5];*
- Common Procedural Rules for Requesting, Preparing and the Granting of European technical approvals set out in the Annex to Commission Decision 94/23/EC[6];
- Guideline for European technical approval of "Liquid applied roof waterproofing kits - Part 6: Specific stipulations for kits based on polyurethane", ETAG 005-06.

2 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.

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 indicated on page 1 of this European technical approval.

4 This European technical approval may be withdrawn by Deutsches Institut für Bautechnik, 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 Deutsches Institut für Bautechnik. 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 language. This version corresponds fully to the version circulated within EOTA. Translations into other languages have to be designated as such.

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 2011*, p. 2178
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/ products and intended use

1.1 Definition of the construction product

The liquid applied roof waterproofing "InoPaz H2O" is a kit, which consists of the components:

- primer "Epoxy Primer XL-100" (for mineral substrates and steel)
- liquid applied roof waterproofing on the basis of a 2-component polyurethane for brush, spray or squeegee application
- polyester fleece as reinforcement

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

For an adequate adhesion of the waterproofing layer – depending on the type of substrate – a primer is needed. In General the primer belonging to the substrate is given in the manufacturer's technical dossier[7] (MTD). In single cases the manufacturer is responsible to give guidance which pretreatment/primer is required.

Annex 1 shows the system build-up of the roof waterproofing "InoPaz H2O".

The minimum layer thickness of the roof waterproofing applied is 2,0 mm. The weight of the polyester fleece is at least 200 g/m²

1.2 Intended use

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

In the MTD to this European technical approval (ETA) the manufacturer gave information concerning the substrates which the product is suitable for and how these substrates shall be pretreated.

The verifications which are the basis of this ETA give reason for the assumption of an intended working life[8] of the roof waterproofing of 10 years, 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] The manufacturer's technical dossier (MTD) comprises all information necessary for the production an the installation of the product as well as for 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.

[8] "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 product 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 are satisfied.

The verified property values of the product lead to classifications and 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 leads to the classification in class F according to EN 13501-1[9].

The classification of the external fire performance of the liquid applied roof waterproofing according to EN 13501-5[10] is class F_{ROOF}.

According to the manufacturer's declaration the roof waterproofing taking account of the EU database[11] 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 products 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 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 005-06).

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/EC[12] on the procedure of attestation of conformity has laid down for waterproofing with 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.

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

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

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

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

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

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

a) Tasks for the manufacturer:
   (1) factory production control,

b) Tasks for the notified body:
   (2) initial type-testing of the product.

3.2 Responsibilities

3.2.1 Tasks for the manufacturer

3.2.1.1 Factory production control

The manufacturer shall exercise permanent internal control of production. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures. This production control system shall ensure that the product is in conformity with this European technical approval.

The factory production control shall be in accordance with the appropriate part of the control plan[13] .

The manufacturer may only use initial materials according to the MTD. He shall inspect or control the initial materials on acceptance according to the control plan.

The factory production control follows the identifying properties of the components given in ETAG 005 Part 6 and as specified in 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, on the basis of a contract, involve a body which is notified for the tasks referred to in section 3.1 in the field of the product in order to undertake the actions laid down in section 3.2.2. For this purpose, the "control plan" referred to in section 3.2.2 shall be handed over by the manufacturer to the notified body involved.

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

The initial type-testing refers to the product properties stated in the appropriate part of the control plan to this ETA. They follow the product properties given in ETAG 005 Part 6.

[13] The control plan is a confidential part of the MTD. 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).

If the verifications underlying this ETA have been furnished on samples from the current production, these will replace the initial type-testing.

Otherwise the necessary initial type-testing shall be carried out according to the provisions of the control plan and observance of the required property values shall be ascertained by the notified body.

After changing the production process the initial type-testing shall be repeated.

3.3 CE marking

The CE marking[14] shall be affixed on the packaging of the kit of the product "InoPaz H2O" 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, ETA 13/00xx,
- number of the European technical approval guideline, ETAG 005,
- indication of classifications according to Annex 1.

The components shall be marked as belonging to the kit "InoPaz H2O".

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

4.1 Manufacturing

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

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

4.2 Design and dimensioning

The fitness for the respective use of the roof waterproofing results from 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 shall be considered.

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

In the MTD the manufacturer gave information on the quantities consumed and the processing, which shall lead to a thickness of the cured roof waterproofing of at least 2,0 mm.

4.3 Installation

The fitness for use of the roof waterproofing 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,
- finding out whether to the given ambient temperature the application with th adjustment for summer or winter is to be accomplished,
- ensuring a thickness of the cured waterproofing of at least 2,0 mm by processing appropriate minimum quantities of material,
- inspections during installation and of the finished system 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.

Uwe Bender
Head of Department

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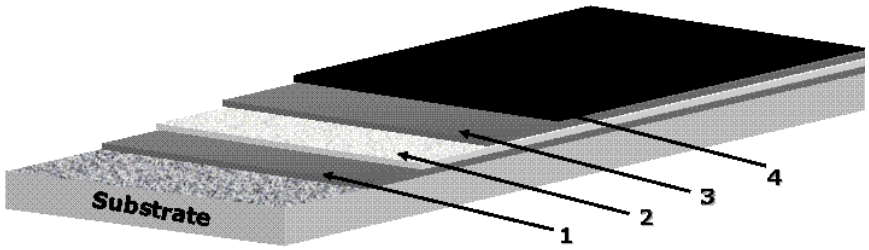
Hemme



Components	1 Primer (where required) 2 1st layer of liquid synthetic material 3 Polyester fleece layer 4 2nd layer of liquid synthetic material

Roof waterproofing "InoPaz H2O":

Minimum layer thickness	2,0 mm (minimum quantity consumed: 2,5 kg/m²)
Water vapour diffusion resistance factor μ	≈ 5700
Resistance to wind loads	≥ 50 kPa for tear resistant substrates
External fire performance	EN 13501-5 class F
Reaction to fire	EN 13501-1 class F
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:	W2
Climatic zones:	M and S
Imposed loads:	P1 to P3 (non-compressible substrate, e.g. concrete /steel and compressible substrate, e.g. insulation boards)
Roof slope:	S1 to S4
Lowest surface temperature:	TL2 (- 10 °C)
Highest surface temperature:	TH4 (90 °C)

Inopaz H2O Pazkar Ltd	Annex 1
System built-up and classifications	