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-05/0197

English translation prepared by DIBt - Original version in German language

Handelsbezeichnung *Trade name*	Dachabdichtung MARISEAL 250 Dachabdichtung MARISEAL 250 FLASH *Roof waterproofing MARISEAL 250* *Roof waterproofing MARISEAL 250 FLASH*
Zulassungsinhaber *Holder of approval*	MARIS POLYMERS S.A. Industrial Area of Inofita 32011 Inofita GRIECHENLAND
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: vom *from* *Validity:* bis *to*	21 June 2013 21 June 2018
Herstellwerk *Manufacturing plant*	MARIS POLYMERS S.A. Industrial Area of Inofita 32011 Inofita GRIECHENLAND

Diese Zulassung umfasst *This Approval contains*	8 Seiten einschließlich 1 Anhang *8 pages including 1 annex*
Diese Zulassung ersetzt *This Approval replaces*	ETA-05/0197 mit Geltungsdauer vom 20.03.2013 bis 14.10.2015 *ETA-05/0197 with validity from 20.03.2013 to 14.10.2015*

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 and intended use

1.1 Definition of the construction product

The liquid applied roof waterproofing "MARISEAL 250" and "MARISEAL 250 FLASH" are kits, which consist of the components:

- primer (if required),
- liquid applied roof waterproofing on the basis of a one-component reactive polyurethane,
- polyester fleece "MARISEAL FABRIC" as reinforcement.

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). For single cases the manufacturer is responsible to give guidance which pretreatment/primer is required.

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

Annex 1 shows the system build-up of the roof waterproofing "MARISEAL 250" and "MARISEAL 250 FLASH".

Depending on the levels the minimum layer thickness of the roof waterproofing applied is 1.6 mm respectively 2.9 mm. The weight of the polyester fleece is approx. 110 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 levels of performance 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 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[8] of the roof waterproofing of 10 respectively 25 years depending on the classifications, 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 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.

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 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 leads to the classification in class E 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 in 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 polyurethan" (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 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.

9	EN 13501-1:2007+A1:2009	Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests
10	EN 13501-5:2005+A1:2009	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	

In addition, according to the Decision 2001/596/EC of the European Commission[13] the system 3 of attestation of conformity applies for this type of product with regard to reaction to fire. 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[14].

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.

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

14 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).

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 follows the product properties given in ETAG 005 Part 6.

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[15] shall be affixed on the packaging of the kit of the product "MARISEAL 250" and "MARISEAL 250 FLASH" 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-05/0197
- number of the European technical approval guideline, ETAG 005,
- short definition of classification according to Annex 1.

The components shall be marked as belonging to the kit "MARISEAL 250" or "MARISEAL 250 FLASH".

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 product 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 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 shall be considered.

[15] 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 roof waterproofing of at least 1.6 mm respectively 2.9 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, e.g. "MARISEAL 250 FLASH" for vertical and strong pitched areas,
- 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 of at least 1.6 mm respectively 2.9 mm by processing appropriate minimum quantities of material,
- 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:

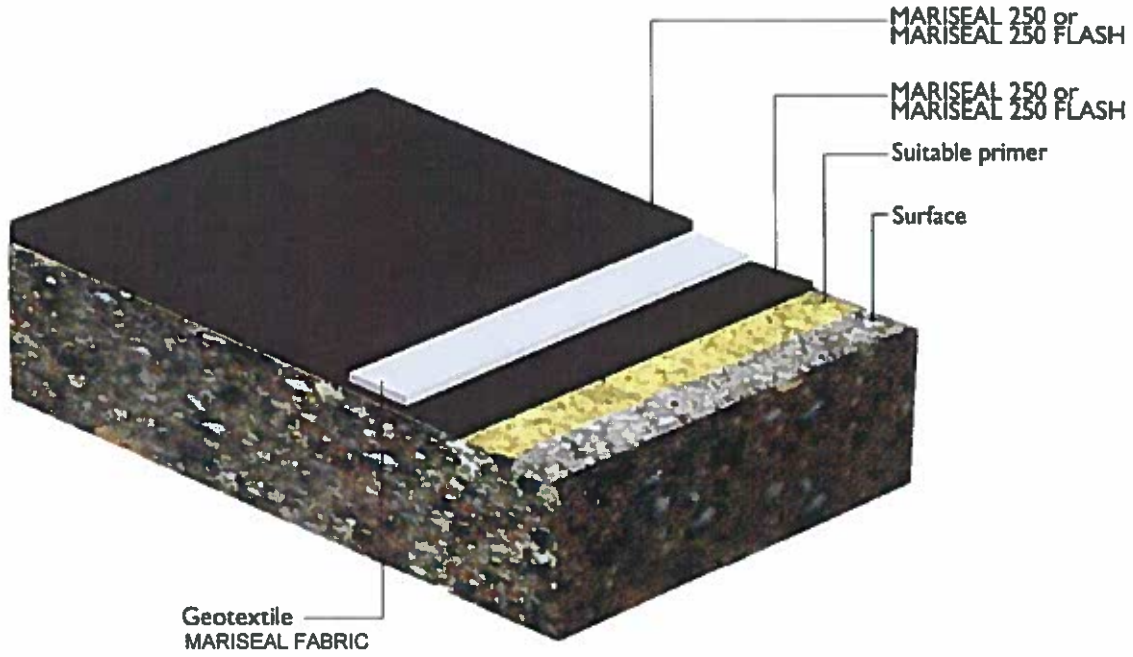
- Use
- maintenance
- repair

are given in the MTD.

Dirk Brandenburger
Head of Department

beglaubigt:
Hemme

Deutsches Institut für Bautechnik DIBt



Applicable to the roof waterproofing **"MARISEAL 250"** and **"MARISEAL 250 FLASH"**:

Minimum layer thickness	1.6 mm	2.9 mm
minimum quantity consumed:	2.4 kg/m²	4.1 kg/m²
Water vapour diffusion resistance factor μ	μ ≈ 1830	
Resistance to wind loads	≥ 50 kPa for substrates with tear resistance	
Resistance to spreading fire and radiant heat	EN 13501-5 class F_{ROOF}	
Reaction to fire	EN 13501-1class E	
Statement on dangerous substances	does not contain any	
Resistance to plant roots	no performance determined	
Resistance to slipperiness Resistance to slipperiness	no performance determined	
Levels of use categories according to ETAG 005 with relation to:		
Working life:	W2	W3
Climatic zones	M und S	
Imposed loads		
non-compressible substrate, e.g. concrete/steel	P1 bis P3	P1 bis P4
compressible substrate, e.g. plates made from mineral wool	P1 bis P3	P1 bis P4
Roof slope	S1 bis S4	
Lowest surface temperature	TL3 (-20 °C)	TL4 (-30 °C)
Highest surface temperature	TH4 (90 °C)	

Roof waterproofing **MARISEAL 250** and Roof waterproofing **MARISEAL 250 FLASH**, MARIS POLYMERS S.A.	Annex 1
System built up and classification	

Deutsches Institut für Bautechnik

DIBt

Approval body for construction products and types of construction

Bautechnisches Prüfamt

Member of EOTA, UEAtc and WFTAO

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Date: 18/6/2013

Ref: II 34-8.04.02-180/13

Amending the European technical approval ETA-09/0241 for:
MARISEAL DETAIL

Your application, dated 9/5/2013

Dear Sir or Madam,

Complying with your application concerning the amending the European technical approval enclosed please find the European technical approval as well as the *Gebührenbescheid* ('Directive for the payment of fees'). In addition an English translation is attached to the approval.

We would like to point out that before starting the production and affixing the CE marking of the construction products listed in the European technical approval the requirements according to the conditions for the attestation of conformity have to be fulfilled including the involvement of an approved testing laboratory, inspection body and certification body in accordance with the Council Directive 89/106/EEC (Construction Products Directive) as amended.
We would like to further inform you that for keeping the records of the factory production control deadlines have to be observed which differ in the individual states of the European Economic Area. A period of five years applies to the use of the subject of approval in the Federal Republic of Germany.

Furthermore, we would like to inform you that on 1 July 2013 the Regulation (EU) N° 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC (Construction Products Regulation - CPR) is going to be fully entered into force.
According to art. 66 (4) of the Construction Products Regulation, manufacturer and importers may use European technical approvals issued in accordance with the Construction Products Directive as European Technical Assessments throughout the period of validity of those approvals.

Since the Construction Products Regulation foresees the issue of European Technical Assessments from 1 July 2013 onwards the prolongation of your European technical approval is not possible.

In order to allow CE marking of your products after the validity of your European technical approval will have been exceeded we propose to apply for a European Technical Assessments in due time. However,

the procedure for issuing the future European Technical Assessment will be a different one than the one presently applied for the granting of European technical approvals. The effects of the new regulations on the extent of European Technical Assessments in contrast to European technical approvals are impossible to predict at present.

Objection to the approval is admissible. It is to be raised in writing within one month on receipt of the approval or entered in the minutes at Deutsches Institut für Bautechnik. We would like to draw your attention to the fact that the time-limit for lodging this objection is kept only if the objection is received within this deadline.
The European technical approval can be entered in the official lists of Deutsches Institut für Bautechnik and sent to the other EOTA bodies and the EOTA Secretariat General for information before the objection period has expired, if you express in writing vis-à-vis Deutsches Institut für Bautechnik a waiver of legal remedies against the European technical approval as attached.

The legal basis is section 6 and section 7 sub-section 1 of the *Bauproduktengesetz (BauPG)* ('Construction Products Law') of 01 April 1998 (*BGBl I* p. 812) as amended by law of 05 December 2012 (*BGBl I* p. 2449).

Regarding the design of the letters "CE" within the context of the CE marking following the conditions of the European technical approval reference is made to Annex III (4.1) of the Council Directive 89/106/EEC of 21 December 1988. The corresponding extract of this Annex as well as the corresponding sources are attached for your information.

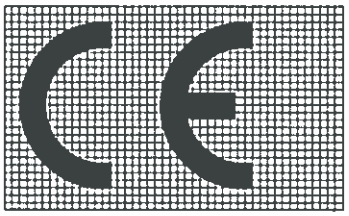
Yours sincerely

Hemme

Encl:

4.1 The CE conformity marking

- The CE conformity marking shall consist of the initials 'CE' taking the following form:



- If the CE marking is reduced or enlarged the proportions given in the above graduated drawing must be respected.

- The various components of the CE marking must have substantially the same vertical dimension, which may not be less than 5 mm.

Extract from Annex III(4.1) of the Council Directive 89/106/EEC of 21 December 1988 (Official Journal of the EC N° L 40 of 12 February 1989, p. 12) amended by the Council Directive 93/68/EEC of 22 July 1993 (Official Journal of the EC N° L 220 of 30 August 1993, p.1) and amended by the Regulation (EC) N° 1882/2003 of the European Parliament and of the Council of 29 September 2003 (OJ EU N° L 284 of 31 October 2003, p. 1, 25).