



Österreichisches Institut für Bautechnik
Schenkenstrasse 4 | 1010 Vienna | Austria
T +43 1 533 65 50 | F +43 1 533 64 23
mail@oib.or.at | www.oib.or.at



European technical approval

ETA-08/0320

(English language translation, the original version is in German language)

Handelsbezeichnung
Trade name

poratec Therm

Zulassungsinhaber
Holder of approval

**Veit Dennert KG
Baustoffbetriebe
Hauptstraße 1
96191 Viereth
Deutschland**

Zulassungsgegenstand
und Verwendungszweck

**Außenseitiges Wärmedämm-Verbundsystem mit Putzschicht
zur Wärmedämmung von Gebäuden**

*Generic type and use of
construction product*

*External Thermal Insulation Composite System with rendering for
the use as external insulation of building walls*

Geltungsdauer vom
Validity from
bis
to

17.05.2012

16.05.2017

Herstellwerk
Manufacturing plant

**Veit Dennert KG
Baustoffbetriebe
Hauptstraße 1
96191 Viereth
Deutschland**

Diese Europäische
technische Zulassung umfasst
*This European technical
approval contains*

15 Seiten inklusive 0 Anhängen

15 pages including 0 Annexes

Diese Europäische technische
Zulassung verlängert
*This European technical
approval extends*

**ETA-08/0320 mit Geltungsdauer von 30.07.2010 bis
17.05.2012**

ETA-08/0320 with validity from 30.07.2010 to 17.05.2012



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

I LEGAL BASES AND GENERAL CONDITIONS

- 1 This European technical approval is issued by the Österreichisches 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 the Council Directive 93/68/EEC² and Regulation (EC) no. 1882/2003 of the European Parliament and of the Council³
 - Kärntner Akkreditierungs- und Baustoffzulassungsgesetz vom 16. Dezember 1993. LGBl. K Nr. 24/1994 idF. LGBl. K Nr. 78/1998
 - Common Procedural Rules for Requesting, Preparing and the Granting of European technical approvals set out in the Annex to Commission Decision 94/23/EC⁴
 - Guideline for European technical approval of "External Thermal Insulation Composite Systems with rendering" ETAG no. 004, edition 2000
- 2 The Österreichisches Institut für Bautechnik is authorised 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 manufacturer 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 the Österreichisches Institut für Bautechnik, in particular pursuant to information by the Commission according to Article 5(1) of Council Directive 89/106/EEC.
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- 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 no. L 40, 11.2.1989, p. 12

² Official Journal of the European Communities no. L 220, 30.8.1993, p. 1

³ Official Journal of the European Union no. L 284, 31.10.2003, p. 1.

⁴ Official Journal of the European Communities no. L 17, 20.1.1994, p. 34.

II SPECIFIC CONDITIONS OF THE EUROPEAN TECHNICAL APPROVAL

1 Definition of products and intended use

The External Thermal Insulation Composite System, called ETICS in the following text, is designed and installed in accordance with the ETA-holder's design and installation instructions, deposited with the Österreichisches Institut für Bautechnik. The ETICS comprises the following components, which are factory-produced by the ETA-holder or a supplier. The holder is ultimately responsible for the ETICS.

1.1 Definition of the construction product (kit)

| | Components (see § 2.5 for further description, characteristics and performances of the components) | Coverage (kg/m ²) | Thickness (mm) |
|---|--|---|--------------------------|
| Insulation materials with associated methods of fixing | Bonded ETICS (partially or fully bonded. National application documents shall be taken into account) | | |
| | ➤ Insulation product: According to ETA-05/0179 "System Dennert" | / | 50 to 200 |
| | ➤ Adhesives: - poratec KS-L: Mineral paste, cement base with silica sand, dispersion powder, additives | 5,0 to 10,0 (paste) | / |
| Insulation materials with associated methods of fixing | Mechanically fixed ETICS with anchors and supplementary adhesive (see § 2.3.3 a) for possible associations insulation product/anchors) | | |
| | ➤ Insulation product: According to ETA-05/0179 "System Dennert" | / | 50 to 200 |
| | ➤ Adhesives: - poratec KS-L: Mineral paste, cement base with silica sand, dispersion powder, additives | 5,0 to 10,0 (paste) | / |
| | ➤ Anchors: Anchors with valid ETA according to ETAG 014 "Plastic Anchors For Fixing Of External Thermal Insulation Composite Systems With Rendering" | / | / |
| Base coat | - poratec KS-L: Mineral paste, cement base with silica sand, dispersion powder, additives | 4,0 to 5,0 (paste) | 3,0 |
| Glass fibre mesh | ➤ Standard glass fibre mesh: - poratec- Glasfasergewebe mesh size between 6 mm and 6 mm - weber.therm Textilglasgitter mesh size between 3 mm and 5 mm | / | / |
| Key coat | - poratec PG-K Ready to use pigmented liquid | approx. 0,30 (l/m ²) | / |
| | - poratec PG-M Ready to use pigmented liquid | approx. 0,30 (l/m ²) | / |
| | - weber.prim Putzgrund Ready to use pigmented liquid | approx. 0,30 (l/m ²) | / |

| | Components (see § 2.5 for further description, characteristics and performances of the components) | Coverage (kg/m ²) | Thickness (mm) |
|---|---|---|----------------------------|
| Finishing coat | ➤ Ready to use pastes – synthetic binder: - poratec KHP: particle size 1,0/1,5/2,0/3,0/6,0 mm | 1,5 to 6,0 | Regulated by particle size |
| | - weber.pas Kunstharzputz particle size 1,5/2,0/3,0 mm | 2,5 to 5,0 | |
| | ➤ Ready to use paste – silicon resin: - poratec SHP particle size 1,0/1,5/2,0/3,0 mm | 1,5 to 4,5 | |
| | ➤ Ready to use paste – silicate binder: - poratec SIP particle size 1,5/2,0/3,0 mm | 1,5 to 4,4 | |
| | ➤ Cement based powder requiring addition of 20 to 25 % water: - poratec MIP particle size 1,5/2,0/3,0/6,0 mm | 1,5 to 5,5 | |
| | ➤ Ready to use paste – silicate/organic binder: - weber.pas Silikatputz particle size 1,5/2,0/3,0 mm | 2,5 to 5,0 | |
| | ➤ Ready to use paste – silicate/silicone and organic binder: - weber.pas extraclean particle size 1,5/2,0/3,0 mm | 2,5 to 5,0 | |
| | - weber.pas decofino particle size 1,0 mm | 1,8 | |
| | - weber.pas modelfino particle size 0,5 mm | 1,5 | |
| | ➤ Ready to use paste – silicone and organic binder: - weber.pas Silikonharzputz particle size 1,5/2,0/3,0 mm | 2,5 to 5,0 | |
| ➤ Ready to use paste – organic binder: - weber.pas topdry particle size 1,5/2,0/3,0 mm | 2,5 to 5,0 | | |
| Ancillary materials | Descriptions in accordance with § 3.2.2.5 of the ETAG 004 Remain under the ETA-holder responsibilities | | |

1.2 Intended use

This ETICS is intended for use as external insulation of buildings' walls. The walls are made of masonry (bricks, blocks, stones ...) or concrete (cast on site or as prefabricated panels) with a reaction to fire classification A1 or A2-s2,d0 according to EN 13501-1 and a minimum density of 820 kg/m³ or A1 according to the EC decision 96/603/EC as amended. The ETICS is designed to give the wall to which it is applied satisfactory thermal insulation.

The ETICS is made of non load-bearing construction elements. It does not contribute directly to the stability of the wall on which it is installed, but it can contribute to durability by providing enhanced protection from the effect of weathering.

The ETICS can be used on new or existing (retrofit) vertical walls. It can also be used on horizontal or inclined surfaces which are not exposed to precipitation.

The ETICS is not intended to ensure the airtightness of the building structure.

The choice of the method of fixing depends on the characteristics of the substrate, which could need preparation (see § 7.2.1 of the ETAG no. 004) and shall be done in accordance with the national instructions.

The provisions made in this European Technical Approval (ETA) are based on an assumed intended working life of at least 25 years, provided that the conditions laid down in sections 4.2, 5.1 and 5.2 for the packaging, transport, storage and installation as well as appropriate use, maintenance and repair are met. The indications given as to the working life cannot be interpreted as a guarantee given by the manufacturer or the Approval Body, but should only be regarded as a means for choosing the appropriate products in relation to the expected economically reasonable working life of the works.

2 Characteristics of products and methods of verification

2.1 General

The identification tests and the assessment of the fitness for use of this ETICS according to the Essential Requirements were carried out in compliance with the "ETA Guidance no. 004" concerning External Thermal Insulation Composite Systems with rendering -edition March 2000 (called ETAG no. 004 in this ETA).

2.2 ETICS characteristics

2.2.1 Reaction to fire

| Configuration: | Maximum declared organic content of the rendering system | Minimum declared flame retardant content of the rendering system | Euroclass according to EN 13501-1 : 2002 |
|----------------------|--|--|--|
| poratec Therm | Base coat: 1,45 % Finishing coat: 9,8 % | Base coat: 0 % Finishing coat: 8,8 % | A2-s1, d0 |

Note: A European reference fire scenario has not been laid down for facades. In some Member States, the classification of ETICS according to EN 13501-1: 2002 might not be sufficient for the use in facades. An additional assessment of ETICS according to national provisions (e.g. on the basis of a large scale test) might be necessary to comply with Member State regulations, until the existing European classification system has been completed.

2.2.2 Water absorption (capillarity test)

- Base coat:
 - Water absorption after 1 hour < 1 kg/m²
 - Water absorption after 24 hours < 0,5 kg/m²

➤ Rendering system:

| | | Water absorption after 24 hours | |
|---|---------------------------|---------------------------------|-------------------------|
| | | < 0,5 kg/m ² | ≥ 0,5 kg/m ² |
| Rendering systems: base coat (including key coat according to clause 1.1) + finishing coats indicated hereafter: | poratec SIP | | X |
| | poratec SHP | X | |
| | poratec KHP | X | |
| | weber.pas Silikatputz | X | |
| | weber.pas extraclean | X | |
| | weber.pas decofino | X | |
| | weber.pas modelfino | X | |
| | weber.pas Silikonharzputz | X | |
| | weber.pas Kunstharzputz | X | |
| | weber.pas topdry | X | |
| poratec MIP | X | | |

2.2.3 Hygrothermal behaviour

The hygrothermal performance is determined according to ETAG 004 clause 5.1.3.2.1.
None of the following defects occur during the testing:

- blistering or peeling of any paint finish
- failure or cracking associated with joints between insulation product boards or profiles fitted with system
- detachment of the render
- cracking allowing water penetration to the insulation layer

The system can be seen as resistant to hygrothermal cycles.

2.2.4 Freeze / thaw behaviour

The water absorption of basecoat and the rendering systems are less than 0,5 kg/m² after 24 hours (except finishing coat "poratec SIP").

During the simulated method with the finishing coat "poratec SIP" none of the following defects are determined:

- 1) blistering or peeling of any paint finish
- 2) detachment of the rendering coat
- 3) cracking allowing water penetration to the insulation layer

The corresponding configurations of the **ETICS** are assessed as **freeze/thaw resistant**.

2.2.5 Impact resistance

The resistance to hard body impacts (3 Joules and 10 Joules) and to perforation lead to the following categories:

| | | Single standard layer | Double standard layer |
|---|---------------------------|-----------------------|-----------------------|
| Rendering systems: base coat (including key coat according to clause 1.1) + finishing coats indicated hereafter: | poratec SIP | Category II | Category II |
| | poratec SHP | | |
| | poratec KHP | | |
| | weber.pas Silikatputz | | |
| | weber.pas extraclean | | |
| | weber.pas decofino | | |
| | weber.pas modelfino | | |
| | weber.pas Silikonharzputz | | |
| | weber.pas Kunstharzputz | | |
| | weber.pas topdry | | |
| poratec MIP | Category III | Category III | |

2.2.6 Water vapour permeability

| | | Equivalent air thickness (m) |
|---|---------------------------|---|
| Rendering systems: base coat (including key coat according to clause 1.1) + finishing coats indicated hereafter: | poratec SIP | $\leq 1,0$ m (test result obtained with particle size 2,0 mm: 0,1 m) |
| | poratec SHP | $\leq 1,0$ m (test result obtained with particle size 2,0 mm: 0,2 m) |
| | poratec KHP | $\leq 1,0$ m (test result obtained with particle size 2,0 mm: 0,3 m) |
| | poratec MIP | $\leq 1,0$ m (test result obtained with particle size 2,0 mm: 0,1 m) |
| | weber.pas Silikatputz | $\leq 1,0$ m (test result obtained with particle size 2,0 mm: 0,2 m) |
| | weber.pas extraclean | $\leq 1,0$ m (test result obtained with particle size 2,0 mm: 0,2 m) |
| | weber.pas decofino | $\leq 1,0$ m (test result obtained with particle size 2,0 mm: 0,2 m) |
| | weber.pas modelfino | $\leq 1,0$ m (test result obtained with particle size 2,0 mm: 0,2 m) |
| | weber.pas Silikonharzputz | $\leq 1,0$ m (test result obtained with particle size 2,0 mm: 0,2 m) |
| | weber.pas Kunstharzputz | $\leq 1,0$ m (test result obtained with particle size 2,0 mm: 0,3 m) |
| | weber.pas topdry | $\leq 1,0$ m (test result obtained with particle size 2,0 mm: 0,3 m) |

2.2.7 Dangerous substances

A written declaration was submitted by the ETA-holder.

In addition to the specific clauses relating to dangerous substances contained in this ETA, there may be other requirements applicable to the ETICS falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Product Directive, these requirements need also to be complied with, when and where they apply.

2.3 Safety in use

2.3.1 Bond strength

- Base coat onto insulation product

| Conditionings | |
|---------------|---|
| Initial state | After the hygrothermal cycles (on the rig) |
| ≥ 0,08 MPa | ≥ 0,08 MPa |

- Adhesives onto substrate and insulation product (safety in use of the bonded ETICS)

| | | Conditionings | | |
|--------------|-------------------------|---------------|---|--|
| | | Initial state | 48 h immersion in water + 2 h 23 °C/50 % RH | 48 h immersion in water + 7 days 23 °C/50 % RH |
| poratec KS-L | Concrete | ≥ 0,25 MPa | ≥ 0,08 MPa | ≥ 0,25 MPa |
| | Insulation product 1 | ≥ 0,08 MPa | ≥ 0,03 MPa | ≥ 0,08 MPa |
| | Insulation product 2 | ≥ 0,08 MPa | ≥ 0,03 MPa | ≥ 0,08 MPa |

The ETICS shall be installed on the substrate with application of the adhesive on the following **minimal surfaces**:

| Tensile strength perpendicular to the face of the insulation product | |
|---|----------|
| | ≥ 80 kPa |
| poratec KS-L | 45 % |

2.3.2 Fixing strength (displacement test)

Test not required because the ETICS fulfils the following criteria:

$$E \cdot d < 50000 \text{ N/mm}$$

where:

- E: modulus of elasticity of the base coat without glass fibre mesh
- d: mean dried thickness of the base coat

2.3.3 Wind load resistance

Safety in use of mechanically fixed ETICS **using anchors**

The following values only apply for the combination (anchor plate characteristics) / (insulation product characteristics) mentioned in this table. All anchors which will be used are shown in the control plan.

| | | |
|---|--|-------------------------------|
| Anchors for which the following failure loads apply | Trade name | acc. to clause 1.1 of the ETA |
| | Plate diameter (mm) | ≥ 60 |
| Characteristics of the insulation product panels for which the following failure loads apply | Thickness (mm) | ≥ 80 |
| | Tensile strength perpendicular to the face (kPa) | ≥ 80 |

For all calculations the following formula shall be used:

$$R_d = \frac{4,0}{m}$$

$$R_d \geq S_d$$

where

R_d design resistance

S_d wind load suction

m national safety factor of resistance for normal materials (partial safety factor to be chosen in function of the type of failure which occurred and the ageing of material properties concerned).

2.3.4 Thermal resistance

The thermal transmittance of the substrate wall covered by the ETICS is calculated in accordance with the standard EN ISO 6946:

$$U_c = U + \Delta U$$

$$\Delta U = \chi_p \cdot n$$

where:

$\chi_p \cdot n$: Has only to be taken into account if it is greater than 0,04 (W/(m².K))

U_c : Global thermal transmittance of the covered wall (W/ (m².K))

n : Number of anchors (through insulation product) per m²

χ_p : Local influence of thermal bridge caused by an anchor. The values listed below can be taken into account if not specified in the anchor's ETA:

= 0,002 W/K for anchors with a stainless steel screw with the head covered by plastic material and for anchors with an air gap at the head of the screw ($\chi_p \cdot n$ negligible for $n < 20$)

= 0,004 W/K for anchors with a galvanized steel screw with the head covered by a plastic material ($\chi_p \cdot n$ negligible for $n < 10$)

= negligible for anchors with plastic nails (reinforced or not with glass fibres ...)

U : Thermal transmittance of the current part of the covered wall (excluding thermal bridges) (W/ (m².K)) determined as follows:

$$U_c = 1 / (R_i + R_{render} + R_{substrate} + R_{se} + R_{si})$$

where:

- R_i : Thermal resistance of the insulation product in (m².K)/W
 R_{render} : Thermal resistance of the render (about 0,02 (m².K)/W)
 $R_{substrate}$: Thermal resistance of the substrate of the building (concrete,...) in (m².K)/W
 R_{se} : External superficial thermal resistance in (m².K)/W
 R_{si} : Internal superficial thermal resistance in (m².K)/W

The influence of the PVC profiles is negligible.

2.4 Aspect of durability and serviceability

2.4.1 Bond strength after ageing

| | | after hygrothermal cycles (on the rig) or after 7 days immersion in water + 7 days 23 °C/50 % RH |
|---|----------------------------------|--|
| Rendering systems: base coat (including key coat according to clause 1.1) + finishing coats indicated hereafter: | poratec SIP | ≥ 0,08 MPa |
| | poratec SHP | |
| | poratec KHP | |
| | poratec MIP | |
| | weber.pas Silikatputz | |
| | weber.pas extraclean | |
| | weber.pas decofino | |
| | weber.pas modelfino | |
| | weber.pas Silikonharzputz | |
| | weber.pas Kunstharzputz | |
| weber.pas topdry | | |

2.5 Components' characteristics

2.5.1 Insulation product

For detailed characteristics of the insulation product see ETA-05/0179 "System Dennert 045"

2.5.2 Anchors

Anchors for insulation products:

All anchors, which will be used, can be seen in the control plan

2.5.3 Render

The average value of the crack width of the base coat with the glass fibre mesh, measured at a render strain value of 0,8 % is about 0,5 mm.

2.5.4 Glass fibres meshes

| | Alkalis resistance | | | |
|--|---|------|--|------|
| | Residual resistance after ageing (N/mm) | | Relative residual resistance: % (after ageing) of the strength in the as delivered state | |
| | Warp | Weft | Warp | Weft |
| poratec-Glasfasergewebe Glass fibre mesh with mesh size between 6 mm and 6 mm | ≥ 20 | ≥ 20 | ≥ 50 | ≥ 50 |
| weber.therm Textilglasgitter Glass fibre mesh with mesh size between 3 mm and 5 mm | ≥ 20 | ≥ 20 | ≥ 50 | ≥ 50 |

3 Evaluation and attestation of Conformity and CE marking

3.1 System of attestation of conformity

According to the decision 97/556/EC of the European Commission the system 2+ of attestation of conformity applies.

In addition, according to the decision 2001/596/EC of the European Commission, the systems 1 and 2+ of attestation of conformity apply with regard to reaction to fire.

Considering the Euroclass A2 for the reaction to fire, the system of attestation of conformity, regarding other characteristics than reaction to fire, is system 2+. This system is described in the Council Directive 89/106/EEC Annex III, 2 (ii), first possibility as follows:

Declaration of conformity of the ETICS by the manufacturer on the basis of:

- a) Tasks for the manufacturer:
 - 1) Initial type-testing of the ETICS and the components
 - 2) Factory Production Control
 - 3) Testing of samples taken at the factory in accordance with a control plan
- b) Tasks for the Notified Body:
 - 4) Certification of factory production control on the basis of:
 - Initial inspection of factory and of factory production control
 - Continuous surveillance, assessment and approval of factory production control

Considering the Euroclass A2 for reaction to fire, the system of attestation of conformity, regarding reaction to fire characteristic, is system 1. This system 1 is described in the Council Directive 89/106/EEC Annex III, 2 (i), as follows:

Certification of the conformity of the ETICS by a Notified certification Body on the basis of:

- c) Tasks for the manufacturer:
 - 1) Factory Production Control
 - 2) Further testing of samples taken at the factory by the manufacturer in accordance with a control plan

- d) Tasks for the Notified Body:
- 3) Initial type-testing of the ETICS and the components
 - 4) Initial inspection of factory and of factory production control
 - 5) Continuous surveillance, assessment and approval of factory production control

3.2 Responsibilities

3.2.1 Tasks of 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, including records of results performed. This production control system shall insure that the product is in conformity with this European technical approval.

The manufacturer may only use components stated in the technical documentation of this European technical approval.

For the components of the ETICS which the ETA-holder does not manufacture by himself, he shall make sure that factory production control carried out by the other manufacturers gives the guaranty of the components compliance with the European technical approval.

The factory production control and the provisions taken by the ETA-holder for components not produced by himself shall be in accordance with the control plan⁵ relating to this European technical approval which is part of the technical documentation of this European technical approval. The control plan is laid down in the context of the factory production control system operated by the manufacturer and deposited at the Österreichisches Institut für Bautechnik.

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

3.2.1.2 Other tasks of the manufacturer

The manufacturer shall, on the basis of a contract, involve a body (bodies) which is (are) notified for the tasks referred to in section 3.1 in the field of ETICS in order to undertake the actions laid down in section 3.3. For this purpose, the control plan referred to in sections 3.2.1.1 and 3.2.2 shall be handed over by the manufacturer to the notified body or bodies involved.

For initial type testing (in case of system 2+) the results of the tests performed as part of the assessment for the European technical approval can be used unless there are changes in the production line or plant. In such cases, the necessary initial type testing has to be agreed between the Österreichisches Institut für Bautechnik and the Notified Bodies involved.

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

The initial type-testing mentioned above could be taken over by the manufacturer for this declaration.

⁵ The control plan is a confidential part of the European technical approval and only handed over to the notified body or bodies involved in the procedure of conformity.

3.2.2 Tasks of the Notified Bodies

The Notified Body shall perform the:

- initial type-testing of the product (for system 1)
The results of the tests performed as part of the assessment for the European technical approval can be used unless there are changes in the production line or plant. In such cases, the necessary initial type testing has to be agreed between the Österreichisches Institut für Bautechnik and the Notified Bodies involved.
- initial inspection of factory and of factory production control
The Notified Body (Bodies) shall ascertain that, in accordance with the control plan, the factory (in particular the employees and the equipment) and the factory production control are suitable to ensure continuous and orderly manufacturing of the components according to the specifications mentioned in clause 2 of this ETA.
- continuous surveillance, assessment and approval of factory production control
The Notified Body (Bodies) shall visit the factory at least once a year for surveillance of this manufacturer having a FPC system complying with EN ISO 9001 covering the manufacturing of the ETICS components. It has to be verified that the system of factory production control and the specified automated manufacturing process are maintained taking into account the control plan.

These tasks shall be performed in accordance with the provisions laid down in the control plan of this European technical approval.

The Notified Body (Bodies) shall retain the essential points of its (their) actions referred to above and state the results obtained and conclusions drawn in written report.

- In the case of Attestation of Conformity system 1:
The Notified Body involved by the manufacturer shall issue an EC certificate of conformity of the product stating the conformity with the provisions of this European technical approval.
- In the case of Attestation of Conformity system 2+:
The Notified Body involved by the manufacturer shall issue an EC certificate of conformity of the factory production control stating the conformity with the provisions of this European technical approval.

In cases where the provisions of the European technical approval and its control plan are no longer fulfilled, the Certification Body shall withdraw the certificate of conformity and inform the Österreichisches Institut für Bautechnik without delay.

3.3 CE marking

The CE marking shall be affixed either on the product itself, on a label attached to it, on its packaging or on the commercial documents accompanying the components of the ETICS. The letters "CE" shall be followed by the identification number of the Notified Body involved and be accompanied by the following additional information:

- the name or identifying mark and address of the ETA-holder
- the last two digits of the year in which the CE marking was affixed
- the number of the EC certificate of conformity of Factory Production Control (system 2+)
- the number of the EC certificate of conformity for the ETICS (system 1)
- the number of the European technical approval
- the ETICS trade name
- the number of the ETAG

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

4.1 Manufacturing

The European technical approval is issued for the ETICS on the basis of agreed data/information, deposited with the Österreichisches Institut für Bautechnik, which identifies the ETICS that has been assessed and judged. Changes to the ETICS or production process, which could result in this deposited data/information being incorrect, should be notified to the Österreichisches Institut für Bautechnik before the changes are introduced. The Österreichisches Institut für Bautechnik 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 or alterations to the ETA, shall be necessary.

4.2 Installation

4.2.1 General

It is the responsibility of the ETA-holder to guarantee that the information about design and installation of this ETICS are easily accessible to the concerned people. These information can be given using reproductions of the respective parts of the European technical approval. Besides, all the data concerning the execution shall be clearly indicated on the packaging and/or the enclosed instruction sheets using one or several illustrations.

In any case, the user shall comply with the national regulations and particularly concerning fires and wind load resistance.

Only the components described in clause 1.1 with characteristics according to clause 2 of this ETA can be used for the ETICS.

The requirements given in ETAG 004, chapter 7 have to be considered.

4.2.2 Design

- To bond the ETICS, the minimal bonded surface and the method of bonding shall comply with characteristics of the ETICS as well as the national regulations. In any case, the minimal bonded surface shall be see § 2.3.1.
- To mechanically fix the ETICS, the choice and the rate of the fixings shall be determined considering
 - the design wind load suction and the national regulations (taking into account the national safety factors, the design rules, ...)
 - the characteristic resistance of the anchors into the considered substrate (see installation parameters – effective anchorage depth, characteristic resistance ... – in the ETA of the anchor)
 - the safety in use of the ETICS according to the method of fixing

4.2.3 Execution

The recognition and preparation of the substrate as well as the generalities about the execution of the ETICS shall be carried out in compliance with

- chapter 7 of the ETAG no. 004 with, in case of bonded ETICS, imperative removal of any existing organic finishes,
- national regulations in effect

The particularities in execution linked to the different methods of fixing and the application of the rendering system shall be handled in accordance with ETA-holder prescriptions. In particular it is suitable to comply with the quantities of rendering applied, the thickness regularity and the drying periods between two layers.

5 Indications to the manufacturers

5.1 Packaging, transport and storage

Packaging of the components has to be such that the products are protected from moisture during transport and storage, unless other measures are foreseen by the manufacturer for this purpose.

The components have to be protected against damage.

It is the responsibility of the manufacturer(s) to ensure that these provisions are easily accessible to the concerned people.

5.2 Use, maintenance and repair

The finishing coat shall normally be maintained in order to fully preserve the ETICS's performances.

Maintenance includes at least

- the repairing of localised damaged areas due to accidents
- the aspect maintenance with products adapted and compatible with the ETICS (possibly after washing or ad hoc preparation)

Necessary repairs should be done rapidly.

It is important to be able to carry out maintenance as far as possible using readily available products and equipment, without spoiling appearance.

It is the responsibility of the manufacturer(s) to ensure that these provisions are easily accessible to the concerned people.

On behalf of Österreichisches Institut für Bautechnik



Rainer Mikulits
Managing Director