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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)

Člen EOTA
Member of EOTA

European Technical Approval ETA – 08/0348

(English translation prepared by TSUS - Original version in Slovak language)

Trade name: *Obchodný názov:*	**weber.therm comfort+**
Holder of approval: *Držiteľ osvedčenia:*	**Saint Gobain Weber spa** **Via Sacco e Vanzetti 54 z.i.1** **41042 Fiorano Modenese (Modena)** **Italy**
Generic type and use of construction product: *Typ a účel použitia stavebného výrobku:*	**External Thermal Insulation Composite System with rendering on glass mineral wool for the use as external insulation to the walls of buildings** *Vonkajší tepelnoizolačný kompozitný systém s omietkou z minerálnej vlny na báze sklenených vlákien pre použitie ako vonkajšia izolácia stien budov*
Validity *Platnosť*	**from:** *od:* **20. 11. 2008** **to:** *do:* **19. 11. 2013**
Manufacturing plant: *Miesto výroby:*	**Saint Gobain Weber spa** **Via Sacco e Vanzetti 54 z.i.1** **41042 Fiorano Modenese (Modena)** **Italy**
This European Technical Approval contains: *Toto Európske technické osvedčenie obsahuje*	**15 pages including 1 annex** *15 strán vrátane 1 prílohy*

Európska organizácia pre technické osvedčovanie
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I LEGAL BASES AND GENERAL CONDITIONS

1. The European Technical Approval is issued by Building Testing and Research Institute (Technický a skúšobný ústav stavebný, n. o.) 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 the Council Directive 93/68/EEC[2] and Regulation (EC) no. 1882/2003 of the European Parliament and of the Council[3];
   - Act No. 90/1998 Coll. on construction products in wording of later regulations;
   - Common Procedural Rules for Requesting, Preparing and the Granting of European Technical Approvals set out in the Annex to Commission Decision 94/23/EC[4];
   - Guideline for European Technical Approval of „External Thermal Insulation Composite Systems with rendering“ ETAG No. 004, edition 2000.
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[1] Official Journal of the European Communities no. L40, 11.2.1989, p. 12
[2] Official Journal of the European Communities no. L220, 30.8.1993, p. 1
[3] Official Journal of the European Union no. L284, 31.10.2003, p. 1
[4] Official Journal of the European Comminities no. L17, 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 „weber.therm comfort+“ called ETICS in the following text, is designed and installed in accordance with the ETA-holder´s design and installation instructions, deposited with Building Testing and Research Institute. 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.

This ETICS can be sold under the trade name „weber.therm comfort+“. The annex 1 gives correspondence to trade names of used components.

1.1 Definition of the construction product (kit)

	Components (see § 2.3 for further description, characteristics and performances of the components)	**Coverage (kg/m^2)**	**Thickness (mm)**
	Mechanically fixed ETICS with supplementary adhesive (see § 2.2.8.3 for possible associations MW/anchors). According to ETA-holder´s prescription the minimal bonded surface shall be at least 40 %. National application documents shall be taken into account).		
	• **Insulation products**	/	
	weber.therm L25 — **weber.therm L25/40**		40
	weber.therm L25 — **weber.therm L25/50**		50
	weber.therm L25 — **weber.therm L25/60**		60
	weber.therm L25 — **weber.therm L25/80**		80
	weber.therm L25 — **weber.therm L25/100**		100
	weber.therm L25 — **weber.therm L25/120**		120
	MW-EN 13162-T5-CS(10)25-TR10-WS traspirable and water repellent glass wool boards		
	• **Supplementary adhesive** **weber.therm AP50** (grey coloured cement binder in powder form requiring addition of water in the proportion of 19 %)	2,0-3,0	/
	• **Anchors** **weber.therm TA3 / TERMOZ 8 NZ** **weber.therm TA4 / BRAVOLL ® PTH-L 60/8- La** **weber.therm TA5 / BRAVOLL ® PTH-KZL 60/8- La**		
Base coat	• **weber.therm AP50** (grey coloured cement binder in powder form requiring addition of water in the proportion of 19 %). Weber.therm AP50 consists of main components: cement, inerts (carbonate and silica), resins and specific additives.	3,0-4,0	Mean (dry): 4,3 Minimal (dry): 4,0

Glass fibre mesh	• **weber.therm RE160** alkaline resistant glass fibre mesh (glass fibre mesh with minimal mesh size 3,5 mm in warp direction and 3,8 mm in weft direction and mass per unit area over (155+50) g/m^2)	/	/
Key coat	• **weber.prim RC14** ready to use pigmented liquid. Weber.prim RC14 used with weber.cote action F and weber.cote action R as well.	0,08 l/m^2	
Finishing coat	• Ready to use paste – styrene-acrylic resin binder **weber.cote action R** (particle size 1,2 mm), floated structure	2,0	Regulated by particles size
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/m^3 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 the product 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 (called ETAG no. 004 in this ETA).

2.2 ETICS characteristics

2.2.1 Reaction to fire

The reaction to fire was determined according to ETAG 004, clause 5.1.2.1. The product as defined under clause 1.1 reached the following classification.

Table 1

Configuration	The declared organic content/ Heat combustion	The flame retardant content	Euroclass according to EN 13501-1
Adhesive **weber.therm AP50**	max. 3,95 %/ 0,782 MJ/kg	no flame retardant	B - s1, d0
MW panels **weber.therm L25** (from 40 mm to 120 mm)	- max. 3 MJ/kg	no flame retardant	
Base coat **weber.therm AP50**	max. 3,95 %/ 0,782 MJ/kg	no flame retardant	
Finishing coat **weber.cote action R**	max. 13,03 %/ 3,24 MJ/kg	no flame retardant	
All other configuration (ETICS including insulation material with density bigger than (75 kg/m^3 ± 8%) and thickness bigger than 120 mm	-	-	F (no performance determined)

Mounting and fixing:

The assessment of reaction to fire is based on tests with maximal insulation layer thickness of SBI/120 mm, EN ISO 11 925-2/60 mm, EN ISO 1716 and insulation material density (75 kg/m^3 ± 8%) and a rendering system with finishing coat weber.cote action R and thickness 1,2 mm.

For the SBI this ETICS is mounted directly to a gypsum plasterboard substrate (reaction to fire A2) with a minimum density of 800 kg/m^2.

The installation of the ETICS was carried out by the manufacturer (holder of approval) following the manufacturer‘ s specifications (instruction sheet) using a single layer of the glass fibre mesh all over the test specimen (no overlapping glass fibre mesh).

The test specimens were prefabricated and did not include any joints. The panel edges were rendered except the upper and bottom edges.

Anchors were not included in the tested ETICS as they have no influence on the test result.

Please note that in some member states the classification on the basis of SBI test is not accepted. Additional tests might be required e.g. large-scale tests to demonstrate compliance with a member state’s fire regulation.

Further the edges of the ETICS always have to be protected against fire.

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: 2007 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.

Extended application:

The test results covers arrangements with insulation material (MW) of a lower thickness and density as well as render systems with a lower organic content.

2.2.2 Water absorption (capillarity test)

- Base coat **weber.therm AP50**
  - Water absorption after 1 hour < 1 kg/m^2
  - Water absorption after 24 hours < 0,5 kg/m^2
- Rendering system:

	Water absorption after 24 hours	
	< 0,5 kg/m^2	**≥ 0,5 kg/m^2**
Rendering system: base coat **weber.therm AP50** + finishing coat **weber.cote action R** (including key coat according to clause 1.1)	**x**	

2.2.3 Hygrothermal behaviour

- Hygrothermal cycles have been performed on a rig

  None of the following defects occurred during the testing:
  - blistering or peeling of any finishing coat,
  - failure or cracking associated with joints between insulation product boards or profiles fitted with system,
  - detachment of render
  - cracking allowing water penetration to the insulation layer.

  The ETICS is so **assessed resistant to hygrothermal cycles**.

2.2.4 Freeze/thaw behaviour

- Rendering system with finishing coat: the water absorptions of both base coat and the rendering system are less than 0,5 kg/m^2 after 24 hours and so the corresponding configuration(s) 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 resistance to perforation lead to the following use category.

	Single standard mesh
Rendering system: base coat **weber.therm AP50** + finishing coat **weber.cote action R** (including key coat according to clause 1.1)	Category II

2.2.6 Water vapour permeability

	Equivalent air thickness (m)
Rendering system: base coat **weber.therm AP50** + finishing coat **weber.cote action R** (including key coat according to clause 1.1)	**≤ 1,0** (test results obtained with finishing coat weber.cote action R: 0,35, particles size 1,2 mm)

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 provision). In order to meet the provisions of the Construction Product Directive, these requirements need also to be complied with, when and where they apply.

2.2.8 Safety in use

2.2.8.1 Bond strength

- Base coat **weber.therm AP50** onto glass wool boards

Conditionings		
Initial state	**After the hygrothermal cycles (on the rig)**	**After the freeze/thaw cycles (on samples)**
< 0,08 MPa (but failure into insulation product)	< 0,08 MPa (but failure into insulation product)	Test not required because freeze/thaw cycles not necessary

This ETICS can be used as mechanically fixed with supplementary adhesive, where bonded area is over 40 %.

2.2.8.2 Fixing strength (displacement test)

Test not required because the ETICS fulfils the following criteria:

- E x d = 3 664 N/mm < 50 000 N/mm, where E is modulus of elasticity of base coat weber.therm AP50 without glass fibre mesh and d is mean dried thickness of the base coat.

2.2.8.3 Wind load resistance

Safety in use of mechanically fixed ETICS using anchors

The following values only apply for the combination (anchor's trade name) / (MW board's characteristics) mentioned in the first lines of each table.

Anchors for which the following failure loads apply		Trade name		**BRAVOLL® PTH-KZ 60/8-La BRAVOLL® PTH-KZL 60/8-La TERMOZ 8 NZ**
		Plate diameter (mm)		≥ 60
Characteristic of the insulation product panels for which the following failure loads apply		Thickness (mm)		≥ 40
		Tensile strength perpendicular to the face (kPa)		≥ 10
Failure loads (N)	Anchors not placed at the panel joint (pull – through test)		R_{panel}:	Minimum: **630** Average: **669**
	Anchors placed at the panel joint (static foam block test)		R_{joint}	Minimum: **282** Average: **295**

The wind load resistance of the ETICS R_d is calculated as follows:

$$R_d = [R_{panel} \times n_{panel} + R_{substrate} + R_{joint} \times n_{joint}] / \gamma$$

n_{panel}: number (per m^2) of anchors not placed at the panel joint
n_{joint}: number (per m^2) of anchors placed at the panel joint
γ: national safety factor

2.2.9 Thermal resistance

The additional thermal resistance provided by the ETICS (R_{ETICS}) to the substrate wall is calculated from the thermal resistance of the insulation product (R_D), determined in accordance with clause 5.2.6.1 ETAG 004, and from the tabulated R_{render} value of the render system (R_{render} is about 0,02 m^2xK/W),

$$R_{ETICS} = R_D + R_{render} [(m^2 \cdot K)/W]$$

as described in:

EN ISO 6946-1: Building components and building elements – Thermal resistance and thermal transmittance – Calculation method.

EN 12524: Building materials and products – Hygrothermal properties – Tabulated design values.

If the thermal resistance can not be calculated, it can be measured on the complete ETICS as described:

EN 1934: Thermal performance of buildings – Determination of thermal resistance by hot box method using heat flow meter - Masonry.

The thermal bridges caused by mechanical fixing devices influence the thermal transmittance of the entire wall and shall be taken into account using the following calculation:

$$U_c = U + \Delta U \ [W/(m^2 \cdot K)]$$

where:

U_c corrected thermal transmittance of the entire wall, including thermal bridges

U thermal transmittance of the entire wall, including ETICS, without thermal bridges (W/m^2xK)

$$U = 1/ [R_{ETICS} + R_{substrate} + R_{se} + R_{si}]$$

$R_{substrate}$ thermal resistance of the substrate wall [$(m^2 \cdot K)/W$]

R_{se} external surface thermal resistance [(m²·K)/W]

R_{si} internal surface thermal resistance [(m²·K)/W]

ΔU correction term of the thermal transmittance for mechanical fixing devices = $\chi_p \cdot n$ (for anchors)

χ_p point thermal transmittance value of the anchor [W/K]. See EOTA Technical Report 25. If not specified in the anchors ETA, the following values apply:

= 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

= 0,004 W/K for anchors with a galvanized steel screw with the head covered by a plastic material

= 0,008 W/K for all other anchors (worst case)

n number of anchors per m²

The influence of thermal bridges can also be calculated as described in:

EN ISO 10211: Thermal bridges in building – Heat flows and surface temperatures. Detailed calculations.

It should be calculated according to this standard if there are more than 16 anchors per m^2 foreseen. The χ_p – values given by manufacturer do not apply in this case.

2.2.10 Aspect of durability and serviceability

2.2.10.1 Bond strength after ageing

Rendering system: base coat **weber.therm AP50** + finishing coat indicated hereafter (including key coat according to clause 1.1)**:**	**After hygrothermal cycles** (on the rig)	**After freeze/thaw cycles**
weber.cote action R	< 0,08 MPa*)	Test not required
*) Note: Cohesive rupture occurred - in the insulation product		

2.3 Components' characteristics

2.3.1 Insulation product

Glass wool boards for mechanically fixed ETICS with anchors

Traspirable and water repellent boards, having right-angled edges (MW) according to EN 13162 and having the description and characteristics defined in the table below.

Description and characteristics	MW glass wool boards "weber.therm L25" For mechanically fixed ETICS with supplementary adhesive	
Reaction to fire/EN 13501-1	**A2 – s1, d0**	Density: 75 kg/m^3 ± 8%) Thickness: from 40 mm to 120 mm
Thermal resistance (m^2.K/W)	Defined in the CE marking in reference to EN 13162 "Thermal insulation products for buildings. Factory made mineral wool (MW) products. Specification"	
Thickness (mm)/EN 823	MW - EN 13162 – T5	
Compression strength/EN 826	MW - EN 13162 - CS(10)25	
Water absorption (partial immersion)/ EN 1609	< 1 kg/m^2	
Water vapour diffusion resistance factor (μ)/EN 12086-EN 13162	1,1	
Tensile strength perpendicular to the faces in dry conditions (kPa)/EN 1607	(MW - EN 13162 - TR10) ≥ 10	

2.3.2 Anchors

Anchors for insulating product are used as a fixing device in mechanically fixed systems.

Trade name	Plate diameter (mm)	Characteristic resistance in the substrate
BRAVOLL®PTH-KZ 60/8 - La BRAVOLL®PTH-KZL 60/8 - La	60	see ETA 05/0055
TERMOZ 8 NZ	60	see ETA 03/0019

2.3.3 Render

The mean value of the crack width of the base coat **weber.therm AP50** with glass fibre **weber.therm RE 160**, measured a render strain value of 2 % is max. 0,22 mm.

2.3.4 Glass fibre mesh

	Alkalis resistance			
	Residual strength after ageing (N/mm)		**Relative residual resistance: % (after ageing) of the strength in the as delivered state**	
	Warp	**Weft**	**Warp**	**Weft**
weber.therm RE 160	≥ 20		≥ 50	

3.0 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.

Concerning the Euroclass B and F for the reaction to fire of the ETICS, 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 of the manufacturer:
- Initial-type testing of the ETICS and the components
- Factory Production Control
- Testing of samples taken at the factory in accordance with a prescribed Control plan[5]

b) Tasks of the Notified Body:
Certification of factory production control based on:
- Initial inspection of factory and factory production control
- Continuous surveillance, assessment and approval of factory production control

Concerning the Euroclass B for the reaction to fire of the ETICS, 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 conformity of the ETICS by a Notified Body on the basis of:

c) Tasks for the manufacturer:
- Factory Production Control
- Further testing of samples taken at the factory by the manufacturer in accordance with a prescribed Control plan[5]

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

3.2 Responsibilities

3.2.1 Task of the manufacturer

3.2.1.1 Factory production control

The manufacturer shall exercise permanent internal control of production. All 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 including Control plan[5].

For the components of the ETICS which ETA-holder does not manufacture by himself, he shall make sure that the factory production control carried out by the other manufactures 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 plan[5] relating to this European Technical Approval which is part of the technical documentation of this European Technical

[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 attestation of conformity. See section 3.2.2.

Approval. The control plan[5] is laid down in the context of the factory production control system operated by the manufacturer and deposited at Building Testing and Research Institute.

The results of factory production control shall be recorded and evaluated in accordance with the provisions of the Control plan[5].

3.2.1.2 Other tasks of manufacturer

The manufacturer shall, on basis of a contract, involve a body (bodies) which is (are) notified for the tasks referred 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[5] referred to in sections 3.2.1.1 and 3.2.2 shall be handed over by the manufacturer to the Notified Bodies 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 changed in the production line or plant. In such cases, the necessary initial-type testing has to be agreed between Building Testing and Research Institute and the Notified Bodies involved.

The manufacturer shall make a declaration of conformity, stating that the construction product is in conformity with the provision of this European Technical Approval. The initial-type testing mentioned above could be taken over by the manufacturer for this declaration.

3.2.2 Tasks of Notified Bodies

The Notified Body (Bodies) shall perform the:

- initial type-testing of the product (in case of 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 Building Testing and Research Institute 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[5], 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 one a year for a surveillance of this manufacturer having 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[5].

These tasks shall be performed in accordance with the provisions laid down in the Control plan[5] of this European Technical Approval.

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

Ø In the case of Attestation of Conformity system 1:

The Notified Body (Bodies) 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.

Ø In the case of Attestation of Conformity system 2+:

The Notified Body (Bodies) 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 cases where the provisions of the European Technical Approval and its Control plan[5] are no longer fulfilled, the Notified Body shall withdrawn the certificate of conformity and inform Approval Body Building Testing and Research Institute 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 identification 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 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 Approval Body Building Testing and Research Institute, 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 Approval Body Building Testing and Research Institute before the changes are introduced. The Approval Body Building Testing and Research Institute 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 alternations 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 the characteristics according to clause 2 this ETA can be used for the ETICS.

The requirements given in ETAG 004, chapter 7, as well as the information of paragraph 4.2.2 and 4.2.3, have to be considered.

4.2.2 Design

- To mechanically fix the ETICS, the choice and the rate of the fixings shall be determined concerning:

- 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 (cf. § 2.2.8) 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 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 responsibility of the manufacturer(s) to ensure that these provisions are easily accessible to the concerned people.

Jan Slastan

Head of Approval Body

ETICS	weber.therm comfort+	
Adhesive	**weber.therm AP50**	
Base coat		
Insulation product	**weber.therm L25**	**weber.therm L25/40**
		weber.therm L25/50
		weber.therm L25/60
		weber.therm L25/80
		weber.therm L25/100
		weber.therm L25/120
Key coat	**weber.prim RC14**	
Glass fibre mesh	**Article 0160-A**	**weber.therm RE 160**
	Vertex R131 A101	
Anchors	**TERMOZ 8 NZ**	**weber.therm TA3/La***
	BRAVOLL ® PTH-KZ 60/8-La	**weber.therm TA4/La***
	BRAVOLL ® PTH-KZL 60/8- La	**weber.therm TA5/La***
	*L_a is the length of anchor	
Finishing coat	**weber.cote action R**	

weber.therm comfort+	**Annex 1** **of European Technical Approval ETA- 08/0348**
Trade name of the components	