

Technický a skúšobný ústav stavebný, n. o.

**Building Testing and Research Institute** 

Studená 3 821 04 Bratislava Slovak Republic

Phone: +421 2 49228101 E-mail: sternova@tsus.sk Website: www.tsus.sk





# **European Technical Assessment**

## ETA 15/0431 – version 02 of 25/11/2019

#### **General Part**

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: Technický a skúšobný ústav stavebný, n. o.

Trade name of the construction

product

Product family to which the construction product belongs

Baumit StarSystem MW

Product area code: 4

External Thermal Insulation Composite Systems with rendering on mineral wool board and lamella (MW) for the use as external insulation to walls of buildings

Manufacturer

Baumit Beteiligungen GmbH Wopfing 156

A-2754 Waldegg

Austria

http://www.baumit.at

Manufacturing plant

Baumit Beteiligungen GmbH

Wopfing 156 A-2754 Waldegg

Austria

This European Technical Assessment contains

62 pages including 5 annexes which form an integral part

of this assessment.

This European Technical
Assessment is issued in accordance

with regulation (EU) No 305/2011, on

the basis of

ETAG 004, edition June 2013, used as European

Assessment Document (EAD).

This version replaces

ETA 15/0431 – version 01, issued on 23/07/2015

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#### Specific part

#### 1 Technical description of the product

#### 1.1 General

This product is an ETICS (External Thermal Insulation Composite System) with rendering – a kit comprising components which are factory-produced by the manufacturer or component suppliers. The ETICS manufacturer is ultimately responsible for all components of the ETICS specified in this ETA.

The ETICS kit comprises a prefabricated insulation product of mineral wool boards to be mechanically fixed and partially bonded onto a wall (bonded area over 40 %) or a prefabricated insulation product of mineral wool lamellas to be fully bonded onto a wall with the supplementary anchors. The methods of fixing and the relevant components are specified in the table below. The insulation product is faced with a rendering system consisting of one or more layers (site applied), one of which contains reinforcement. The rendering is applied directly to the insulating panels, without any air gap or disconnecting layer.

The ETICS may include special fittings (e.g. base profiles, corner profiles ...) to treat details of ETICS (connections, apertures, corners, parapets, sills ...). Assessment and performance of these components is not addressed in this ETA, however the ETICS manufacturer is responsible for adequate compatibility and performance within the ETICS when the components are delivered as part of the kit.

#### 1.2 Composition of the ETICS

Table 1 – Composition of the ETICS

	Components (see Annex 1 for further description, characteristics and performances of the components)	Coverage (kg/m²)	Thickness (mm)
	Bonded ETICS with supplementary anchors (see Clause 3.4.5) for possible associations MW/anchors). According to ETA-holder's prescription the bonded surface shall be 100 %. National application documents shall be taken into account.		
	Insulation products     Mineral wool slabs "Baumit MineralTherm Lamella"	/	60 to 300
	Supplementary adhesives (types of cement – see page 6)		
	- Baumit StarContact Mineral powder, grey cement of types 4/5/6/7 base with silica sand and lime stone, dispersion powder, additives	4,5 to 5,5 (powder)	
Insulation materials with	Baumit StarContact Speed  Mineral powder, grey cement of type 4 base with silica sand and lime stone, dispersion powder, additives	4,0 to 5,0 (powder)	/
associated methods of fixing	Baumit StarContact white  Mineral powder, white cement of types 1/2/3 base with silica sand and lime stone, dispersion powder, additives	4,5 to 5,5 (powder)	
	Baumit NivoFix Mineral powder, grey cement of types 4/5/6/7 base with silica sand and lime stone, dispersion powder, additives	4,0 to 5,0 (powder)	
	Baumit StarContact forte  Mineral powder, grey cement of type 4 base with silica sand and lime stone, dispersion powder, additives	4,0 to 5,0 (powder)	
	Baumit SupraFix Mineral powder, grey cement of type 4 base with silica sand and lime stone, dispersion powder, additives	4,0 to 5,0 (powder)	
	Anchors     See Annex 2 for list of anchors and their product characteristics.		

	Mechanically fixed ETICS with anchors and supplementary adhesive (see Clause 3.4.5) 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 Mineral wool slabs "Baumit MineralTherm"	/	60 to 300
	Supplementary adhesives (types of cement – see page 6)		
	- Baumit StarContact Mineral powder, grey cement of types 4/5/6/7 base with silica sand and lime stone, dispersion powder, additives	4,5 to 5,5 (powder)	
Insulation materials with	Baumit StarContact Speed  Mineral powder, grey cement of type 4 base with silica sand and lime stone, dispersion powder, additives	4,0 to 5,0 (powder)	/
associated methods of fixing	Baumit StarContact white  Mineral powder, white cement of types 1/2/3 base with silica sand and lime stone, dispersion powder, additives	4,5 to 5,5 (powder)	
	Baumit NivoFix Mineral powder, grey cement of types 4/5/6/7 base with silica sand and lime stone, dispersion powder, additives	4,0 to 5,0 (powder)	
	Baumit StarContact forte  Mineral powder, grey cement of type 4 base with silica sand and lime stone, dispersion powder, additives	4,0 to 5,0 (powder)	
	Baumit SupraFix Mineral powder, grey cement of type 4 base with silica sand and lime stone, dispersion powder, additives	4,0 to 5,0 (powder)	
	Anchors     See Annex 2 for list of anchors and their product characteristics.		
	Baumit StarContact     Preparation: mixing of 6 I to 7 I water/25 kg powder     Composition: Mineral powder, grey cement of types 4/5/6/7     base with silica sand and lime stone, dispersion powder,     additives	6 to 8 (powder)	min. 4,0 to 5,0
Base coats	Baumit StarContact has to be used always with key coat		
Dasc souls	Baumit StarContact white     Preparation: mixing of 6 I to 7 I water/25 kg powder     Composition: Mineral powder, white cement of types 1/2 base with silica sand and lime stone, dispersion powder, additives	6 to 8 (powder)	min. 4,0 to 5,0
	Baumit StarContact white can be used without key coat and with key coat (optional)		
Glass fibres	Standard glass fibre mesh:     (glass fibres mesh with mesh size approx. 4 mm and 4 mm, mass per unit area: min. 145 g/m²):     Baumit StarTex	/	/
meshes	Standard glass fibre mesh:     (glass fibres mesh with mesh size approx. 3,5 mm and 3,8 mm, mass per unit area: min. 160 g/m²):     Baumit StarTex (160)	/	/

	Standard glass fibre mesh:     (glass fibres mesh with mesh size approx. 14 mm and 8 mm, mass per unit area: min. 300 g/m²):     Baumit StrongTex      To be used only with base coat Baumit StarContact white without key coat and finishing coat Baumit SilikonTop reach Category I for impact test (see Table 8)	/	/
14	Baumit UniPrimer:     ready to use pigmented liquid	0,20 to 0,25	
Key coats	Baumit Premium Primer ready to use pigmented liquid	0,25	
	Ready to use pastes – acrylic binder     Baumit GranoporTop     (particles size 1,5/2,0/3,0 mm), floated structure     (particles size 2,0/3,0 mm), ribbed structure	2,5 to 4,2	
	Ready to use pastes – silicone binder     Baumit StarTop     (particles size 1,5/2,0/3,0 mm), floated structure     (particles size 2,0/3,0 mm), ribbed structure	2,5 to 4,2	
	Ready to use pastes – silicone binder     Baumit SilikonTop     (particles size 1,5/2,0/3,0 mm), floated structure     (particles size 2,0/3,0 mm), ribbed structure	2,5 to 4,2	
	<ul> <li>Ready to use pastes – silicone and acrylic binder Baumit CreativTop (particles size 1,0 (Fine)/1,5 (Vario)/3,0 (Trend)/ 4,0 mm (Max), modelling and floated structure</li> </ul>	2,9 to 6,2	
Finishing coats	<ul> <li>Ready to use pastes – acrylic binder         Baumit StyleTop         (particles size 1,5/2,0/3,0 mm), floated structure         (particles size 2,0/3,0 mm), ribbed structure     </li> </ul>	2,5 to 4,1	
	<ul> <li>Ready to use pastes – acrylic binder         Baumit PuraTop         (particles size 1,5/2,0/3,0 mm), floated structure         (particles size 2,0/3,0 mm), ribbed structure     </li> </ul>	2,5 to 4,2	
	<ul> <li>Ready to use pastes – silicate binder         Baumit NanoporTop         (particles size 1,5/2,0/3,0 mm), floated structure         (particles size 2,0/3,0 mm), ribbed structure     </li> </ul>	2,5 to 4,2 2,6 to 3,6	
	Ready to use pastes – silicate binder     Baumit SilikatTop     (particles size 1,5/2,0/3,0 mm), floated structure     (particles size 2,0/3,0 mm), ribbed structure	2,5 to 4,2	
	Ready to use pastes – silicone binder     Baumit SiliporTop     (particles size 1,5/2,0/3,0 mm), floated structure     (particles size 2,0/3,0 mm), ribbed structure	2,5 to 4,2	

	Ready to use with mixing of water     Baumit Fascina Special     (particles size 1,0/2,0/3,0/4,0 mm), floated structure     Preparation: mixing of 6,0 I to 7,5 I water/25 kg powder     Composition: mineral powder, cement (CEM I 52,5N grey)	2,2 to 5,5	
	base with silica sand, dispersion powder, additives     Ready to use pastes – silicate binder     Baumit NanoporFine     (particles size 1,0 mm), floated structure	2,0	
	Ready to use pastes – silicone binder     Baumit StarTop Fine     (particles size 1,0 mm), floated structure	2,0	
	Ready to use pastes – silicone binder     Baumit PuraTop Fine     (particles size 1,0 mm), floated structure	2,0	
	Ready to use pastes – acrylic binder     Baumit GranoporFine     (particles size 1,0 mm), floated structure	2,0	
	Ready to use pastes – silicone binder     Baumit FineTop/Baumit SilikonFine     (particles size 1,0 mm), floated structure	2,0	
	Ready to use pastes – silicate-silicone binder     Baumit StellaporTop     (particles size 1,5/2,0/3,0 mm), floated structure     (particles size 2,0/3,0 mm), ribbed structure	2,3 to 4,2	
	Ready to use pastes – acrylic binder     Baumit MosaikSuperfine     (particles size 0,8 mm)	2,7	
	Ready to use pastes – acrylic binder     Baumit MosaikTop     (particles size 2,0 mm)	5,5	
	Ready to use pastes – silicone and acrylic binder Baumit CreativTop Silk (particles size 0,2 mm), floated structure	1,8 to 4,0	0,5 to 2,0
Decorative coats/ plasters*	Ready to use pastes – silicone binder     Baumit FillTop     (particles size 0,5 mm), floated structure	1,4	0,5 to 1,0
	Ready to use pastes – silicone and acrylic binder Baumit CreativTop Pearl (particles size 0,5 mm), floated structure	1,4	0,5 to 1,0
	* To be used optionally with all types of finishing coats mentioned above.		
	Ready to use paint – silicate binder     Baumit NanoporColor	0,5	
Decorative coats/paints**	Ready to use paint – silicone binder     Baumit SilikonColor	0,5	
	Ready to use paint – silicate binder     Baumit SilikatColor	0,5	
	Ready to use paint – acrylic binder     Baumit StyleColor	0,5	
	Ready to use paint – silicone binder     Baumit StarColor	0,5	

	Ready to use paint – acrylic binder     Baumit PuraColor/Baumit ProColor	0,5	
	Ready to use paint – silicate binder Baumit Glitter	0,15 to 0,30	
	Ready to use paint – acrylic binder Baumit Metallic	0,35	
	Ready to use paint – silicate binder Baumit Finish	0,10 to 0,20	
	Ready to use paint – silicate binder Baumit Lasur	0,10 to 0,20	
	Ready to use paint – acrylic binder Baumit GranoporColor	0,5	
	** To be used optionally alone with all types of finishing coats mentioned above or with decorative plasters applying on finishing coats.		
Ancillary materials	Descriptions in accordance with 3.2.2.5 of the ETAG 004.  Remain under the ETA-holder responsibilities.		

#### Cement types:

Cement Type 1 CEM I 52,5N white
Cement Type 2 CEM I 52,5R white
Cement Type 3 CEM I 42,5R white
Cement Type 4 CEM II/A-S 42,5R grey
Cement Type 5 CEM I 42,5R grey
Cement Type 6 CEM II/A-LL 42,5R grey
Cement Type 7 CEM I 52,5N grey

### 2 Specification of the intended use(s) in accordance with the applicable European Assessment Document (hereinafter EAD)

#### 2.1 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). The characteristics of the walls shall be verified prior to use of the ETICS, especially regarding conditions for reaction to fire classifications and for fixing of the ETICS either by bonding or mechanically. 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 004) and shall be done in accordance with the national instructions.

The provisions made in this European Technical Assessment (ETA) are based on an assumed intended working life of at least 25 years, provided that the conditions laid down in Clauses 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 Technical Assessment 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.

The ETICS belong to Category S/W2, according to EOTA Technical Report No. 034.

#### 2.2 Manufacturing

The European Technical Assessment is issued for the ETICS in the basis of agreed data/information, deposited with the Technical Assessment Body Technický a skúšobný ústav stavebný, n. o., which identified 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, shall be notified to the Technical Assessment Body Technický a skúšobný ústav stavebný, n. o. before the changes are introduced. The Technical Assessment Body Technický a skúšobný ústav stavebný, n. o. 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.

#### 2.3 Design and installation

The installation instructions including special installation techniques and provisions for the qualifications of the personnel are given in the manufacturer's technical documentation.

Design, installation and execution of ETICS are to be in conformity with national documents.) Such documents and the level of their implementation in Member States' legislation are different. Therefore, the assessment and declaration if performance are done taking into account general assumptions introduced in 7.1 and 7.2 of ETAG 004 used as EAD, which summarized how information introduced in the ETA and related documents is intended to be used in the construction process and gives advice to all parties interested when normative documents are missing.

#### 2.4 Packaging, transport and storage

The information on packaging, transport and storage is given in the manufacturer's technical documentation. It is the responsibility of the manufacturer(s) to ensure that this information is made know to the concerned people.

#### 2.5 Use, maintenance and repair

The finishing coat shall normally be maintained in order to fully preserve the ETICS performance.

Maintenance includes at least:

- visual inspection of the ETICS;
- the repairing of localized 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 performed as soon as the need has been identified.

It is important to be able to carry out maintenance as far as possible using readily available products and equipment, without spoiling appearance. Only products which are compatible with the ETICS shall be used.

The information on use, maintenance and repair is given in the manufacturer's technical documentation. It is responsibility of the manufacturer(s) to ensure that these provisions are easily accessible to the concerned people.

- 3 Performance of the product and reference to the methods used for its assessment
- 3.0 The performances of the kit as described in this clause are valid provided that the components of the kit comply with Annexes 1 to 3.
- 3.1 Mechanical resistance and stability (BWR 1)

Not relevant.

- 3.2 Safety in case of fire (BWR 2)
- 3.2.1 Reaction to fire (ETAG 004 Clause 5.1.2.1, EN 13501-1)

Table 2 – Reaction to fire classification of ETICS

Configuration	Max. ash content and heat combustion	Flame retardant content	Euroclass according to EN 13501-1
Adhesives:  Baumit StarContact (tested)  Baumit StarContact Speed  Baumit StarContact white  Baumit NivoFix  Baumt StarContact forte  Baumit SupraFix  MW-EN 13162-TR7,5  MW-EN 13162-TR10  MW-EN 13162-TR15 (tested)  thickness: from 60 mm to 300 mm  (tested thickness: 180 mm)  reaction to fire: A1, μ: MU1  measured density: 130 kg/m² to 135 kg/m²  MW-EN 13162-TR80 (tested)  MW-EN 13162-TR100  thickness: from 60 mm to 300 mm  (tested thickness: 180 mm)  reaction to fire: A1, μ: MU1  measured density: 67 kg/m2 to 89 kg/m²  Base coats:  Baumit StarContact (tested in configuration)  Baumit StarContact white  Glass fibre meshes:  Baumit StarTex (160) (tested in configuration)  mass per unit area:  from 145 g/m² + 8 % to 160 g/m² + 8 %  Key coats:  Baumit PremiumPrimer (tested in configuration)	Adhesive: (98,8 to 98) %/ (0,833 ± 0,127) %  Base coat: (98,8 to 98) %/ (0,833 ± 0,127) %  Key coat: (87,1 to 90,1) %/ (2,671 ± 0,088) %  Finishing coat: (88,0 to 0,2) %/ (2,305 ± 0,262) %  Decorative coats/plasters: (90,3 to 92,1) %/ (2,211 ± 0,098)  MJ/kg  Decorative coats/paints: min. 84,8 %/ (4,274 ± 0,014) MJ/kg	Base coat: 0 % Finishing coat: 0 %	A2-s1, d0

#### Technický a skúšobný ústav stavebný, n. o.

Finishing coats:		
Baumit GranoporTop		
Baumit SilikonTop		
Baumit CreativTop		
Baumit StyleTop (tested in configuration)		
Baumit NanoporTop		
Baumit StarTop		
Baumit PuraTop		
Baumit SilikatTop		
Baumit SiliporTop		
Baumit Fascina Special		
Baumit NanoporFine		
Baumit StarTop Fine		
Baumit PuraTop Fine		
Baumit GranoporFine		
Baumit FineTop		
Baumit StellaporTop		
Baumit MosaikTop		
Baumit MosaikSuperfine		
Decorative coats/plasters		
(tested in configuration):		
Baumit CreativTop Silk		
Baumit FillTop		
Baumit CreativTop Pearl		
Decorative coats/paints:		
Baumit NanoporColor		
Baumit SilikonColor		
Baumit SilikatColor		
Baumit StyleColor (tested in configuration)		
Baumit GranoporColor		

Table 3 – Reaction to fire classification of ETICS

Configuration	Max. ash content and heat combustion	Flame retardant content	Euroclass according to EN 13501-1
Adhesives:  Baumit StarContact (tested) Baumit StarContact white Baumit NivoFix Baumt StarContact forte Baumit SupraFix  MW-EN 13162-TR7,5 MW-EN 13162-TR15 (tested) thickness: from 60 mm to 300 mm (tested thickness: 180 mm) reaction to fire: A1, \(\mu\): MU1 measured density: 130 kg/m² to 135 kg/m²  MW-EN 13162-TR80 (tested) MW-EN 13162-TR80 (tested) MW-EN 13162-TR80 (tested) MW-EN 13162-TR80 (tested) MW-EN 13162-TR100 thickness: from 60 mm to 300 mm (tested thickness: 180 mm) reaction to fire: A1, \(\mu\): MU1 measured density: 67 kg/m2 to 89 kg/m² Base coats: Baumit StarContact (tested in configuration) Baumit StarContact (tested in configuration) Baumit StarContact white Glass fibre meshes: Baumit StarTex Baumit StarTex (160) (tested in configuration) mass per unit area: from 145 g/m² + 8 % to 160 g/m² + 8 % Key coats: Baumit UniPrimer Baumit PremiumPrimer (tested in configuration) Finishing coats: Baumit GranoporTop Baumit StarTop Baumit Facina Special Baumit NanoporFine Baumit Facina Special Baumit NanoporFine Baumit Facina Special Baumit NanoporFine Baumit Fillop Baumit GranoporFine Baumit Fillop Baumit GranoporFine Baumit GranoporFine Baumit Fillop Baumit GranoporFine Baumit Fillop Baumit CreativTop Silk Baumit CreativTop Pearl	Adhesive: (98,8 to 98) %/ (0,833 ± 0,127) %  Base coat: (98,8 to 98) %/ (0,833 ± 0,127) %  Key coat: (87,1 to 90,1) %/ (2,671 ± 0,088) %  Finishing coat: (88,0 to 0,2) %/ (2,305 ± 0,262) %  Decorative coats/plasters: (90,3 to 92,1) %/ (2,211 ± 0,098)  MJ/kg  Decorative coats/paints: (98,3±10) % rel/ (29,348 ± 0,122)  MJ/kg	Base coat: 0 % Finishing coat: 0 %	No performance assessed

Decorative coats/paints:		
Baumit StarColor		
Baumit PuraColor		
Baumit Metallic		
Baumit Lasur		
Baumit Finish		
Baumit Glitter (worst case)		

#### Mounting and fixing:

The assessment of reaction to fire is based on tests with maximal insulation layer thickness of 180 mm and insulation material densities 130 kg/m² to 135 kg/m², with maximum organic content/heat combustion of finishing coat 9,8 % to 12 %/(2,305  $\pm$  0,262) % and thicknesses 1,0 mm and 4,0 mm, with maximum heat combustion value of decorative paint/paint (4,274  $\pm$  0,014) MJ/kg, optionally with maximum heat combustion value of decorative paint/plaster (2,211  $\pm$  0,098) MJ/kg.

For the SBI this ETICS is mounted directly to a calcium silicate plasterboard substrate with a minimum density of 820 kg/m<sup>3</sup>.

The installation of the ETICS was carried out by the manufacturer (holder of assessment) 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 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.

#### 3.3 Hygiene, health and environment (BWR 3)

#### 3.3.1 Water absorption (ETAG 004 – Clause 5.1.3.1)

Table 4 - Water absorption of base coats

		Water absorption after 24 hours	
		< 0,5 kg/m <sup>2</sup>	≥ 0,5 kg/m²
Bass seet	Baumit StarContact	х	
Base coat	Baumit StarContact white	х	

Table 5 – Water absorption of rendering systems (with MW boards and MW lamellas)

Base coat		Water absorption	on after 24 hours
Baumit StarC	Baumit StarContact		≥ 0,5 kg/m <sup>2</sup>
	Baumit GranoporTop	Х	
	Baumit StarTop	Х	
	Baumit SilikonTop	Х	
	Baumit CreativTop	Х	
	Baumit StyleTop	Х	
	Baumit PuraTop	Х	
	Baumit NanoporTop	Х	
Rendering systems:	Baumit SilikatTop	Х	
base coat +	Baumit SiliporTop	Х	
key coat according to Clause 1.1	Baumit Fascina Special	Х	
finishing coats indicated hereafter:	Baumit NanoporFine	Х	
	Baumit StarTop Fine	Х	
	Baumit PuraTop Fine	Х	
	Baumit GranoporFine	Х	
	Baumit FineTop	Х	
	Baumit StellaporTop	Х	
	Baumit MosaikSuperfine	Х	
	Baumit MosaikTop	Х	

#### 3.3.2 Watertightness (ETAG 004 – Clause 5.1.3.2)

#### 3.3.2.1 Hydrothermal behaviour (ETAG 004 – Clause 5.1.3.2.1)

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 ETICS;
- detachment of render coat;
- cracking allowing water penetration to the insulation layer (normally not bigger than 0,2 mm).

The ETICS is so assessed resistant to hygrothermal cycles, it means ETICS passed the test without defects.

#### 3.3.2.2 Freeze-thaw behaviour (ETAG 004 – Clause 5.1.3.2.2)

The water absorptions of base coat used in ETICS are less than 0,5 kg/m² after 24 hours and so the corresponding configuration(s) of the ETICS are assessed as freeze/thaw resistant.

The water absorptions of all rendering systems are less than 0,5 kg/m<sup>2</sup> after 24 hours and so the corresponding configuration(s) of the ETICS are assessed as freeze/thaw resistant.

#### **3.3.3** Impact resistance (ETAG 004 – Clause 5.1.3.3)

The resistance to hard body impacts (3 Joules and 10 Joules) leads to the following use categories.

Table 6 – Use categories for ETICS according to impact resistance (on MW-TR7,5)

Baumit StarContact		Single standard mesh
	Baumit GranoporTop**	
	Baumit SilikonTop*	
	Baumit CreativTop**	
	Baumit StarTop**	
	Baumit StyleTop**	
	Baumit PuraTop**	Category II
	Baumit NanoporTop**	
Pour leurine contact	Baumit SilikatTop*	
Rendering systems: base coat indicated above	Baumit SiliporTop**	
key coats according to Clause 1.1	Baumit Fascina Special**	
finishing coats indicated hereafter:	Baumit NanoporFine**	
	Baumit StarTop Fine**	CotogonyIII
	Baumit PuraTop Fine**	Category III
	Baumit GranoporFine**	
	Baumit FineTop**	Category II
	Baumit StellaporTop*	
	Baumit MosaikSuperfine	No performance assessed
	Baumit MosaikTop**	Category II

<sup>\*\*</sup> Test results performed on small samples.

Table 7 – Use categories for ETICS according to impact resistance (on MW-TR7,5)

Baumit StarContact white		Single standard mesh
	Baumit GranoporTop**	Catagonyll
	Baumit SilikonTop**	Category II
	Baumit StarTop**	No performance assessed
	Baumit CreativTop**	Category II
	Baumit StyleTop**	Category II
	Baumit PuraTop**	No performance assessed
	Baumit NanoporTop*	
Dondovina ovetomo	Baumit SilikatTop**	
Rendering systems: base coat indicated above	Baumit SiliporTop**	Category II
key coats according to Clause 1.1 + finishing coats indicated hereafter:	Baumit Fascina Special**	
	Baumit NanoporFine*	
	Baumit StarTop Fine**	No performance
	Baumit PuraTop Fine**	assessed
	Baumit GranoporFine**	
	Baumit FineTop**	Category II
	Baumit StellaporTop *	
	Baumit MosaikSuperfine**	No performance assessed
	Baumit MosaikTop**	Category II

<sup>\*</sup> Test results performed on rig after hydrothermal behaviour cycles. 
\*\* Test results performed on small samples.

Table 8 – Use categories for ETICS according to impact resistance (on MW-TR7,5)

Baumit StarContact white (without using key coat)		Single standard mesh	
	Baumit GranoporTop**		
	Baumit SilikonTop**		
	Baumit StarTop**		
	Baumit CreativTop*		
	Baumit StyleTop**		
	Baumit PuraTop**	Category II	
	Baumit NanoporTop**		
	Baumit SilikatTop**		
Rendering systems: base coat indicated above + finishing coats indicated hereafter:	Baumit SiliporTop**		
	Baumit Fascina Special		
	Baumit NanoporFine*		
	Baumit StarTop Fine**	Cotogony III	
	Baumit PuraTop Fine**	- Category III	
	Baumit GranoporFine		
	Baumit FineTop	Category II	
	Baumit StellaporTop**		
	Baumit MosaikSuperfine	No performance assessed	
	Baumit MosaikTop*	Category II	
* Test results performed on rig after hydrothermal beh ** Test results performed on small samples.	naviour cycles.		

Table 9 – Use categories for ETICS according to impact resistance (on MW-TR7,5)

Baumit StarContact white (without using key coat)		Single standard mesh
Rendering systems: base coat indicated above + double mesh (Baumit StarTex + Baumit StrongTex) + finishing coats indicated hereafter:	Baumit SilikonTop*	Category I
* Test results performed on small samples.		

Table 10 – Use categories for ETICS according to impact resistance (on MW-TR80)

Baumit StarContact		Single standard mesh
	Baumit GranoporTop*	
	Baumit SilikonTop*	
	Baumit StarTop**	
	Baumit CreativTop**	
	Baumit StyleTop**	
	Baumit PuraTop**	Category II
	Baumit NanoporTop	
Den devie e eveteme	Baumit SilikatTop**	
Rendering systems: base coat indicated above + key coats according to Clause 1.1 + finishing coats indicated hereafter:	Baumit SiliporTop**	
	Baumit Fascina Special**	
	Baumit NanoporFine**	
	Baumit StarTop Fine**	Ootonom: III
	Baumit PuraTop Fine**	Category III
	Baumit GranoporFine**	
	Baumit FineTop**	Category II
	Baumit StellaporTop**	
	Baumit MosaikSuperfine	No performance assessed
	Baumit MosaikTop	Category II

Table 11 – Use categories for ETICS according to impact resistance (on MW-TR80) – on small samples

Baumit StarContact white		Single standard mesh	
	Baumit GranoporTop	Onto no mult	
	Baumit SilikonTop	- Category II	
	Baumit StarTop	No performance assessed	
	Baumit CreativTop	Ooto non III	
	Baumit StyleTop	- Category II	
	Baumit PuraTop	No performance assessed	
	Baumit NanoporTop		
Day daying avetome.	Baumit SilikatTop		
Rendering systems: base coat indicated above	Baumit SiliporTop	Category II	
key coats according to Clause 1.1  + finishing coats indicated hereafter:	Baumit Fascina Special		
	Baumit NanoporFine		
	Baumit StarTop Fine	No performance	
	Baumit PuraTop Fine	assessed	
	Baumit GranoporFine		
	Baumit FineTop	Category II	
	Baumit StellaporTop		
	Baumit MosaikSuperfine	No performance assessed	
	Baumit MosaikTop	Category II	

Table 12 – Use categories for ETICS according to impact resistance (on MW-TR80) – on small samples

Baumit StarContact white (without key coat)		Single standard mesh	
	Baumit GranoporTop		
	Baumit SilikonTop		
	Baumit StarTop		
	Baumit CreativTop		
	Baumit StyleTop		
	Baumit PuraTop	Category II	
	Baumit NanoporTop		
	Baumit SilikatTop		
Rendering systems: base coat indicated above + finishing coats indicated hereafter:	Baumit SiliporTop		
	Baumit Fascina Special		
	Baumit NanoporFine		
	Baumit StarTop Fine	0.4	
	Baumit PuraTop Fine	Category III	
	Baumit GranoporFine		
	Baumit FineTop	Category II	
	Baumit StellaporTop		
	Baumit MosaikSuperfine	No performance assessed	
	Baumit MosaikTop	Category II	

#### 3.3.4 Water vapour permeability (ETAG 004 – Clause 5.1.3.4)

## 3.3.4.1 Water vapour permeability of rendering coats – without decorative coats (ETAG 004 – Clause 5.1.3.4)

In Tables 13 to 22, THR means total measured thickness of rendering coat.

Table 13 - Water vapour permeability of rendering systems - without decorative coats

Baumit StarContact		Equivalent air thickness
	Baumit GranoporTop	≤ 1,0 (test results obtained with finishing coat Baumit GranoporTop, floated structure, particles size 3,0 mm: 0,541) THR is 7,7 mm
	Baumit SilikonTop	≤ 1,0 (test results obtained with finishing coat Baumit SilikonTop, floated structure, particles size 3,0 mm: 0,409) THR is 7,7 mm
	Baumit StarTop	≤ 1,0 (test results obtained with finishing coat Baumit StarTop, floated structure, particles size 3,0 mm: 0,361) THR is 7,5 mm
	Baumit CreativTop	≤ 1,0 (test results obtained with finishing coat Baumit CreativTop Max, floated structure, particles size 4,0 mm: 0,459) THR is 8,7 mm
Rendering systems: base coat indicated above + key coat Baumit UniPrimer + finishing coats indicated hereafter:	Baumit StyleTop	≤ 1,0 (test results obtained with finishing coat Baumit StyleTop, floated structure, particles size 3,0 mm: 0,739) THR is 7,7 mm
	Baumit PuraTop	≤ 1,0 (test results obtained with finishing coat Baumit PuraTop, floated structure, particles size 3,0 mm: 0,739) THR is 7,5 mm
	Baumit NanoporTop	≤ 1,0 (test results obtained with finishing coat Baumit NanoporTop, floated structure, particles size 3,0 mm: 0,307) THR is 7,7 mm
	Baumit SilikatTop	≤ 1,0 (test results obtained with finishing coat Baumit SilikatTop, floated structure, particles size 3,0 mm: 0,379) THR is 7,7 mm
	Baumit SilliporTop	≤ 1,0 (test results obtained with finishing coat Baumit SiliporTop, floated structure, particles size 3,0 mm: 0,418) THR is 7,7 mm
	Baumit Fascina Special	≤ 1,0 (test results obtained with finishing coat Baumit Fascina Special, floated structure, particles size 3,0 mm: 0,319) THR is 7,7 mm
	Baumit NanoporFine	≤ 1,0 (test results obtained with finishing coat Baumit Nanopor Fine, floated structure, particles size 1,0 mm: 0,314) THR is 5,7 mm

Baumit StarTop Fine	No performance assessed
Baumit PuraTop Fine	No performance assessed
Baumit GranoporFine	≤ 1,0 (test results obtained with finishing coat Baumit GranoporFine, floated structure, particles size 1,0 mm: 0,428) THR is 5,7 mm
Baumit FineTop	≤ 1,0 (test results obtained with finishing coat Baumit FineTop, floated structure, particles size 1,0 mm: 0,417) THR is 5,7 mm
Baumit StellaporTop	≤ 1,0 (test results obtained with finishing coat Baumit StellaporTop, floated structure, particles size 3,0 mm: 0,439) THR is 7,7 mm
Baumit MosaikTop	≤ 1,0 (test results obtained with finishing coat Baumit MosaikTop, floated structure, particles size 2,0 mm: 0,515) THR is 7,4 mm

Table 14 – Water vapour permeability of rendering systems – without decorative coats

Baumit StarContact		Equivalent air thickness (m)
Rendering systems:	Baumit GranoporTop	≤ 1,0 (test results obtained with finishing coat Baumit GranoporTop, floated structure, particles size 3,0 mm: 0,538) THR is 7,7 mm
	Baumit SilikonTop	≤ 1,0 (test results obtained with finishing coat Baumit SilikonTop, floated structure, particles size 3,0 mm: 0,406) THR is 7,7 mm
base coat indicated above + key coat Baumit PremiumPrimer +	Baumit StarTop	No performance assessed
finishing coats indicated hereafter:	Baumit CreativTop	≤ 1,0 (test results obtained with finishing coat Baumit CreativTop Max, floated structure, particles size 4,0 mm: 0,456) THR is 8,7 mm
	Baumit StyleTop	≤ 1,0 (test results obtained with finishing coat Baumit StyleTop, floated structure, particles size 3,0 mm: 0,736) THR is 7,7 mm

]	
Baumit PuraTop	No performance assessed
Baumit NanoporTop	≤ 1,0 (test results obtained with finishing coat Baumit NanoporTop, floated structure, particles size 3,0 mm: 0,304) THR is 7,7 mm
Baumit SilikatTop	≤ 1,0 (test results obtained with finishing coat Baumit SilikatTop, floated structure, particles size 3,0 mm: 0,376) THR is 7,7 mm
Baumit SilliporTop	≤ 1,0 (test results obtained with finishing coat Baumit SiliporTop, floated structure, particles size 3,0 mm: 0,415) THR is 7,7 mm
Baumit Fascina Special	≤ 1,0 (test results obtained with finishing coat Baumit Fascina Special, floated structure, particles size 3,0 mm: 0,316) THR is 7,7 mm
Baumit NanoporFine	≤ 1,0 (test results obtained with finishing coat Baumit Nanopor Fine, floated structure, particles size 1,0 mm: 0,311) THR is 5,7 mm
Baumit StarTop Fine	No performance assessed
Baumit PuraTop Fine	No performance assessed
Baumit GranoporFine	≤ 1,0 (test results obtained with finishing coat Baumit GranoporFine, floated structure, particles size 1,0 mm: 0,425) THR is 5,7 mm
Baumit FineTop	≤ 1,0 (test results obtained with finishing coat Baumit FineTop, floated structure, particles size 1,0 mm: 0,414) THR is 5,7 mm
Baumit StellaporTop	≤ 1,0 (test results obtained with finishing coat Baumit StellaporTop, floated structure, particles size 3,0 mm: 0,436) THR is 7,7 mm
Baumit MosaikTop	≤ 1,0 (test results obtained with finishing coat Baumit MosaikTop, floated structure, particles size 2,0 mm: 0,513) THR is 7,4 mm

Table 15 – Water vapour permeability of rendering systems – without decorative coats

Baumit StarContact white		Equivalent air thickness (m)
	Baumit GranoporTop	≤ 1,0 (test results obtained with finishing coat Baumit GranoporTop, floated structure, particles size 3,0 mm: 0,540) THR is 7,7 mm
	Baumit SilikonTop	≤ 1,0 (test results obtained with finishing coat Baumit SilikonTop, floated structure, particles size 3,0 mm: 0,408) THR is 7,7 mm
	Baumit StarTop	No performance assessed
	Baumit CreativTop	≤ 1,0 (test results obtained with finishing coat Baumit CreativTop Max, floated structure, particles size 4,0 mm: 0,457) THR is 8,7 mm
Rendering systems: base coat indicated above + key coat Baumit UniPrimer + finishing coats indicated hereafter:	Baumit StyleTop	≤ 1,0 (test results obtained with finishing coat Baumit StyleTop, floated structure, particles size 3,0 mm: 0,740) THR is 7,7 mm
	Baumit PuraTop	No performance assessed
	Baumit NanoporTop	≤ 1,0 (test results obtained with finishing coat Baumit NanoporTop, floated structure, particles size 3,0 mm: 0,308) THR is 7,7 mm
	Baumit SilikatTop	≤ 1,0 (test results obtained with finishing coat Baumit SilikatTop, floated structure, particles size 3,0 mm: 0,380) THR is 7,7 mm
	Baumit SilliporTop	≤ 1,0 (test results obtained with finishing coat Baumit SiliporTop, floated structure, particles size 3,0 mm: 0,421) THR is 7,7 mm
	Baumit Fascina Special	≤ 1,0 (test results obtained with finishing coat Baumit Fascina Special, floated structure, particles size 3,0 mm: 0,322) THR is 7,7 mm
	Baumit NanoporFine	≤ 1,0 (test results obtained with finishing coat Baumit Nanopor Fine, floated structure, particles size 1,0 mm: 0,312) THR is 5,7 mm

Baumit StarTop Fine	No performance assessed
Baumt PuraTop Fine	No performance assessed
Baumit GranoporFine	≤ 1,0 (test results obtained with finishing coat Baumit GranoporFine, floated structure, particles size 1,0 mm: 0,430) THR is 5,7 mm
Baumit FineTop	≤ 1,0 (test results obtained with finishing coat Baumit FineTop, floated structure, particles size 1,0 mm: 0,415) THR is 5,7 mm
Baumit StellaporTop	≤ 1,0 (test results obtained with finishing coat Baumit StellaporTop, floated structure, particles size 3,0 mm: 0,437) THR is 7,7 mm
Baumit MosaikTop	≤ 1,0 (test results obtained with finishing coat Baumit MosaikTop, floated structure, particles size 2,0 mm: 0,514) THR is 7,4 mm

Table 16 – Water vapour permeability of rendering systems – without decorative coats

Baumit StarContact white		Equivalent air thickness (m)
Rendering systems: base coat indicated above + key coat Baumit PremiumPrimer + finishing coats indicated hereafter:	Baumit GranoporTop	≤ 1,0 (test results obtained with finishing coat Baumit GranoporTop, floated structure, particles size 3,0 mm: 0,537) THR is 7,7 mm
	Baumit SilikonTop	≤ 1,0 (test results obtained with finishing coat Baumit SilikonTop, floated structure, particles size 3,0 mm: 0,404) THR is 7,7 mm
	Baumit StarTop	No performance assessed
	Baumit CreativTop	≤ 1,0 (test results obtained with finishing coat Baumit CreativTop Max, floated structure, particles size 4,0 mm: 0,454) THR is 8,7 mm
	Baumit StyleTop	≤ 1,0 (test results obtained with finishing coat Baumit StyleTop, floated structure, particles size 3,0 mm: 0,738) THR is 7,7 mm

Baumit PuraTop	No performance assessed
Baumit NanoporTop	≤ 1,0 (test results obtained with finishing coat Baumit NanoporTop, floated structure, particles size 3,0 mm: 0,300) THR is 7,7 mm
Baumit SilikatTop	≤ 1,0 (test results obtained with finishing coat Baumit SilikatTop, floated structure, particles size 3,0 mm: 0,373) THR is 7,7 mm
Baumit SilliporTop	≤ 1,0 (test results obtained with finishing coat Baumit SiliporTop, floated structure, particles size 3,0 mm: 0,418) THR is 7,7 mm
Baumit Fascina Special	≤ 1,0 (test results obtained with finishing coat Baumit Fascina Special, floated structure, particles size 3,0 mm: 0,320) THR is 7,7 mm
Baumit NanoporFine	≤ 1,0 (test results obtained with finishing coat Baumit Nanopor Fine, floated structure, particles size 1,0 mm: 0,311) THR is 5,7 mm
Baumit StarTop Fine	No performance assessed
Baumit PuraTop Fine	No performance assessed
Baumit GranoporFine	≤ 1,0 (test results obtained with finishing coat Baumit GranoporFine, floated structure, particles size 1,0 mm: 0,424) THR is 5,7 mm
Baumit FineTop	≤ 1,0 (test results obtained with finishing coat Baumit FineTop, floated structure, particles size 1,0 mm: 0,410) THR is 5,7 mm
Baumit StellaporTop	≤ 1,0 (test results obtained with finishing coat Baumit StellaporTop, floated structure, particles size 3,0 mm: 0,436) THR is 7,7 mm
Baumit MosaikTop	≤ 1,0 (test results obtained with finishing coat Baumit MosaikTop, floated structure, particles size 2,0 mm: 0,511) THR is 7,4 mm

Table 17 – Water vapour permeability of rendering systems – without decorative coats and key coat

Baumit StarContact white		Equivalent air thickness (m)
	Baumit GranoporTop	≤ 1,0 (test results obtained with finishing coat Baumit GranoporTop, floated structure, particles size 3,0 mm: 0,507) THR is 7,7 mm
	Baumit SilikonTop	≤ 1,0 (test results obtained with finishing coat Baumit SilikonTop, floated structure, particles size 3,0 mm: 0,375) THR is 7,7 mm
	Baumit StarTop	≤ 1,0 (test results obtained with finishing coat Baumit StarTop, floated structure, particles size 3,0 mm: 0,333) THR is 7,5 mm
	Baumit CreativTop	≤ 1,0 (test results obtained with finishing coat Baumit CreativTop Max, floated structure, particles size 4,0 mm: 0,425) THR is 8,7 mm
Rendering systems: base coat indicated above + finishing coats indicated hereafter:	Baumit StyleTop	≤ 1,0 (test results obtained with finishing coat Baumit StyleTop, floated structure, particles size 3,0 mm: 0,705) THR is 7,7 mm
	Baumit PuraTop	≤ 1,0 (test results obtained with finishing coat Baumit PuraTop, floated structure, particles size 3,0 mm: 0,707) THR is 7,5 mm
	Baumit NanoporTop	≤ 1,0 (test results obtained with finishing coat Baumit NanoporTop, floated structure, particles size 3,0 mm: 0,273) THR is 7,7 mm
	Baumit SilikatTop	≤ 1,0 (test results obtained with finishing coat Baumit SilikatTop, floated structure, particles size 3,0 mm: 0,345) THR is 7,7 mm
	Baumit SilliporTop	≤ 1,0 (test results obtained with finishing coat Baumit SiliporTop, floated structure, particles size 3,0 mm: 0,384) THR is 7,7 mm
	Baumit Fascina Special	≤ 1,0 (test results obtained with finishing coat Baumit Fascina Special, floated structure, particles size 3,0 mm: 0,285) THR is 7,7 mm
	Baumit NanoporFine	≤ 1,0 (test results obtained with finishing coat Baumit Nanopor Fine, floated structure, particles size 1,0 mm: 0,280) THR is 5,7 mm

Baumit StarTop Fine	No performance assessed
Baumit PuraTop Fine	No performance assessed
Baumit GranoporFine	≤ 1,0 (test results obtained with finishing coat Baumit GranoporFine, floated structure, particles size 1,0 mm: 0,394) THR is 5,7 mm
Baumit FineTop	≤ 1,0 (test results obtained with finishing coat Baumit FineTop, floated structure, particles size 1,0 mm: 0,383) THR is 5,7 mm
Baumit StellaporTop	≤ 1,0 (test results obtained with finishing coat Baumit StellaporTop, floated structure, particles size 3,0 mm: 0,405) THR is 7,7 mm
Baumit MosaikTop	≤ 1,0 (test results obtained with finishing coat Baumit MosaikTop, floated structure, particles size 2,0 mm: 0,482) THR is 7,4 mm

## 3.3.4.2 Water vapour permeability of rendering coats – with decorative coats (ETAG 004 – Clause 5.1.3.4)

Table 18 – Water vapour permeability of rendering systems

Fauivalent air thickness		
Baumit StarContact		Equivalent air thickness (m)
	Baumit GranoporTop Baumit GranoporColor	≤ 1,0 (test results obtained with finishing coat Baumit GranoporTop, floated structure, particles size 3,0 mm and Baumit GranoporColor: 0,600) THR is 7,85 mm
	Baumit SilikonTop Baumit SilikonColor	≤ 1,0 (test results obtained with finishing coat Baumit SilikonTop, floated structure, particles size 3,0 mm and Baumit SilikonColor: 0,716) THR is 7,83 mm
Rendering systems: base coat indicated above + key coat Baumit UniPrimer + finishing coats and decorative coats indicated hereafter:	Baumit StarTop Baumit SarColor	≤ 1,0 (test results obtained with finishing coat Baumit StarTop, floated structure, particles size 3,0 mm and Baumit StarColor: 0,625) THR is 7,7 mm
	Baumit CreativTop Max Baumit CreativTop Silk	≤ 1,0 (test results obtained with finishing coat Baumit CreativTop Max, floated structure, particles size 4,0 mm and Baumit CreativTop Silk: 0,759) THR is 9,2 mm
	Baumit StyleTop Baumit StyleColor	≤ 1,0 (test results obtained with finishing coat Baumit StyleTop, floated structure, particles size 3,0 mm and Baumit StyleColor: 0,813) THR is 7,83 mm
	Baumit PuraTop Baumit PuraColor	≤1,0 (test results obtained with finishing coat Baumit PuraTop, floated structure, particles size 3,0 mm and Baumit PuraColor: 0,861) THR is 7,7 mm
	Baumit NanoporTop Baumit NanoporColor	≤ 1,0 (test results obtained with finishing coat Baumit NanoporTop, floated structure, particles size 3,0 mm and Baumit NanoporColor: 0,323) THR is 7,83 mm
	Baumit SilikatTop Baumit SilikatColor	≤ 1,0 (test results obtained with finishing coat Baumit SilikatTop, floated structure, particles size 3,0 mm and Baumit SilikatColor: 0,442) THR is 7,88 mm

Baumit SilliporTop Baumit FillTop	≤ 1,0 (test results obtained with finishing coat Baumit SiliporTop, floated structure, particles size 3,0 mm and Baumit FillTop: 0,981) THR is 8,2 mm
Baumit Fascina Special Baumit NanoporColor	≤ 1,0 (test results obtained with finishing coat Baumit Fascina Special, floated structure, particles size 3,0 mm and Baumit NanoporColor: 0,335) THR is 7,83 mm
Baumit NanoporFine Baumit NanoporColor	≤ 1,0 (test results obtained with finishing coat Baumit Nanopor Fine, floated structure, particles size 1,0 mm: 0,330) THR is 5,83 mm
Baumit StarTop Fine Baumit StarColor	No performance assessed
Baumit PuraTop Fine Baumit PuraColor	No performance assessed
Baumit GranoporFine Baumit GranoporColor	≤ 1,0 (test results obtained with finishing coat Baumit GranoporFine, floated structure, particles size 1,0 mm and Baumit NanoporColor: 0,487) THR is 5,56 mm
Baumit FineTop Baumit SilikonColor	≤ 1,0 (test results obtained with finishing coat Baumit FineTop, floated structure, particles size 1,0 mm and Baumit SilikonColor: 0,478) THR is 5,82 mm
Baumit SilikonTop Baumit FillTop	≤ 1,0 (test results obtained with finishing coat Baumit SilikonTop, floated structure, particles size 3,0 mm and Baumit FillTop: 0,900) THR is 8,2 mm
Baumit StellaporTop Baumit SilikonColor	≤ 1,0 (test results obtained with finishing coat Baumit StellaporTop, floated structure, particles size 3,0 mm: 0,674) THR is 7,83 mm

Table 19 - Water vapour permeability of rendering systems

Baumit StarContact		Equivalent air thickness (m)
	Baumit GranoporTop Baumit GranoporColor	≤ 1,0  (test results obtained with finishing coat Baumit GranoporTop, floated structure, particles size 3,0 mm and Baumit GranoporColor: 0,598) THR is 7,85 mm
	Baumit SilikonTop Baumit SilikonColor	≤ 1,0 (test results obtained with finishing coat Baumit SilikonTop, floated structure, particles size 3,0 mm and Baumit SilikonColor: 0,713) THR is 7,83 mm
	Baumit StarTop Baumit StarColor	No performance assessed
Rendering systems: base coat indicated above + key coat Baumit PremiumPrimer + finishing coats and decorative coats indicated hereafter:	Baumit CreativTop Max Baumit CreativTop Silk	≤ 1,0 (test results obtained with finishing coat Baumit CreativTop Max, floated structure, particles size 4,0 mm and Baumit CreativTop Silk: 0,756) THR is 9,2 mm
	Baumit StyleTop Baumit StyleColor	≤ 1,0 (test results obtained with finishing coat Baumit StyleTop, floated structure, particles size 3,0 mm and Baumit StyleColor: 0,810) THR is 7,83 mm
	Baumit PuraTop Baumit PuraColor	No performance assessed
	Baumit NanoporTop Baumit NanoporColor	≤ 1,0 (test results obtained with finishing coat Baumit NanoporTop, floated structure, particles size 3,0 mm and Baumit NanoporColor: 0,320) THR is 7,83 mm
	Baumit SilikatTop Baumit SilikatColor	≤ 1,0 (test results obtained with finishing coat Baumit SilikatTop, floated structure, particles size 3,0 mm and Baumit SilikatColor: 0,439) THR is 7,88 mm
	Baumit SilliporTop Baumit FillTop	≤ 1,0 (test results obtained with finishing coat Baumit SiliporTop, floated structure, particles size 3,0 mm and Baumit FillTop: 0,978) THR is 8,2 mm
	Baumit Fascina Special Baumit NanoporColor	≤ 1,0 (test results obtained with finishing coat Baumit Fascina Special, floated structure, particles size 3,0 mm and Baumit NanoporColor: 0,332) THR is 7,83 mm

	Baumit NanoporFine Baumit NanoporColor	≤ 1,0  (test results obtained with finishing coat Baumit Nanopor Fine, floated structure, particles size 1,0 mm and Baumit NanoporColor: 0,327) THR is 5,83 mm
	Baumit StarTop Fine Baumit StarColor	No performance assessed
	Baumit PuraTop Fine Baumit PuraTop	No performance assessed
	Baumit GranoporFine Baumit GranoporColor	≤ 1,0 (test results obtained with finishing coat Baumit GranoporFine, floated structure, particles size 1,0 mm and Baumit GranoporColor: 0,485) RHR is 5,56 mm
	Baumit FineTop Baumit SilikonColor	≤ 1,0 (test results obtained with finishing coat Baumit FineTop, floated structure, particles size 1,0 mm and Baumit SilikonColor: 0,475) THR is 5,82 mm
	Baumit SilikonTop Baumit FillTop	≤ 1,0 (test results obtained with finishing coat Baumit SilikonTop, floated structure, particles size 3,0 mm and Baumit FillTop: 0,897) THR is 8,2 mm
	Baumit StellaporTop Baumit SilikonColor	≤ 1,0 (test results obtained with finishing coat Baumit SteallaporTop, floated structure, particles size 3,0 mm and Baumit SilikonColor: 0,671) THR is 7,83 mm

Table 20 – Water vapour permeability of rendering systems

Baumit StarContact white		Equivalent air thickness
Budinii Otal Oomaat wiiito		(m)
	Baumit GranoporTop Baumit GranoporColor	≤ 1,0 (test results obtained with finishing coat Baumit GranoporTop, floated structure, particles size 3,0 mm and Baumit GranoporColor: 0,601) THR is 7,85 mm
	Baumit SilikonTop Baumit SilikonColor	≤ 1,0 (test results obtained with finishing coat Baumit SilikonTop, floated structure, particles size 3,0 mm and Baumit SilikonColor: 0,715) THR is 7,83 mm
	Baumit StarTop Baumit StarColor	No performance assessed
Rendering systems: base coat indicated above + key coat Baumit UniPrimer + finishing coats and decorative coats indicated hereafter:	Baumit CreativTop Max Baumit CreativTop Silk	≤ 1,0 (test results obtained with finishing coat Baumit CreativTop Max, floated structure, particles size 4,0 mm and Baumit CreativTop Silk: 0,758) THR is 9,2 mm
	Baumit StyleTop Baumit StyleColor	≤ 1,0 (test results obtained with finishing coat Baumit StyleTop, floated structure, particles size 3,0 mm and Baumit StyleColor: 0,814) THR is 7,83 mm
	Baumit PuraTop Baumit PuraColor	No performance assessed
	Baumit NanoporTop Baumit NanoporColor	≤ 1,0 (test results obtained with finishing coat Baumit NanoporTop, floated structure, particles size 3,0 mm and Baumit NanoporColor: 0,322) THR is 7,83 mm
	Baumit SilikatTop Baumit SilikatColor	≤ 1,0 (test results obtained with finishing coat Baumit SilikatTop, floated structure, particles size 3,0 mm and Baumit SilikatColor: 0,440) THR is 7,88 mm
	Baumit SilliporTop Baumit FillTop	≤ 1,0 (test results obtained with finishing coat Baumit SiliporTop, floated structure, particles size 3,0 mm and Baumit FillTop: 0,980) THR is 8,2mm
	Baumit Fascina Special Baumit NanoporColor	≤ 1,0 (test results obtained with finishing coat Baumit Fascina Special, floated structure, particles size 3,0 mm and Baumit NanoporColor: 0,336) THR is 7,83 mm

Baumit NanoporFine Baumit NanoporColor	≤ 1,0 (test results obtained with finishing coat Baumit Nanopor Fine, floated structure, particles size 1,0 mm and Baumit NanoporColor: 0,331) THR is 5,83 mm
Baumit StarTop Fine Baumit StarColor	No performance assessed
Baumit PuraTop Fine Baumit PuraColor	No performance assessed
Baumit GranoporFine Baumit GranoporColor	≤ 1,0 (test results obtained with finishing coat Baumit GranoporFine, floated structure, particles size 1,0 mm and Baumit GranoporColor: 0,486) THR is 5,56 mm
Baumit FineTop Baumit SilikonColor	≤ 1,0 (test results obtained with finishing coat Baumit FineTop, floated structure, particles size 1,0 mm and Baumit SilikonColor: 0,477) THR is 5,82 mm
Baumit SilikonTop Baumit FillTop	≤ 1,0 (test results obtained with finishing coat Baumit SilikonTop, floated structure, particles size 3,0 mm and Baumit FillTop: 0,899) THR is 8,2 mm
Baumit StellaporTop Baumit SilikonColor	≤ 1,0 (test results obtained with finishing coat Baumit SilikonTop, floated structure, particles size 3,0 mm and Baumit SilikonColor: 0,673) THR is 7,83 mm

Table 21 – Water vapour permeability of rendering systems

Baumit StarContact white		Equivalent air thickness (m)
	Baumit GranoporTop Baumit GranoporColor	≤ 1,0 (test results obtained with finishing coat Baumit GranoporTop, floated structure, particles size 3,0 mm and Baumit GranoporColor: 0,599) THR is 7,85 mm
	Baumit SilikonTop Baumit SilikonColor	≤ 1,0 (test results obtained with finishing coat Baumit SilikonTop, floated structure, particles size 3,0 mm and Baumit SilikonColor: 0,713) THR is 7,83 mm
	Baumit StarTop Baumit StarColor	No performance assessed
Rendering systems: base coat indicated above + key coat Baumit PremiumPrimer + finishing coats and decorative coats indicated hereafter:	Baumit CreativTop Max Baumit CreativTop Silk	≤ 1,0 (test results obtained with finishing coat Baumit CreativTop Max, floated structure, particles size 4,0 mm and Baumit CreativTop Silk: 0,755) THR is 9,2 mm
	Baumit StyleTop Baumit StyleColor	≤ 1,0 (test results obtained with finishing coat Baumit StyleTop, floated structure, particles size 3,0 mm and Baumit StyleColor: 0,811) THR is 7,83 mm
	Baumit PuraTop Baumit PuraColor	No performance assessed
	Baumit NanoporTop Baumit NanoporColor	≤ 1,0 (test results obtained with finishing coat Baumit NanoporTop, floated structure, particles size 3,0 mm and Baumit NanoporColor: 0,320) THR is 7,83 mm
	Baumit SilikatTop Baumit SilikatColor	≤ 1,0 (test results obtained with finishing coat Baumit SilikatTop, floated structure, particles size 3,0 mm and Baumit SilikatColor: 0,438) THR is 7,88 mm
	Baumit SilliporTop Baumit FillTop	≤ 1,0 (test results obtained with finishing coat Baumit SiliporTop, floated structure, particles size 3,0 mm and Baumit FillTop: 0,980) THR is 8,2 mm
	Baumit Fascina Special Baumit NanoporColor	≤ 1,0 (test results obtained with finishing coat Baumit Fascina Special, floated structure, particles size 3,0 mm and Baumit NanoporColor: 0,334) THR is 7,83 mm

	Baumit NanoporFine Baumit NanoporColor	≤ 1,0  (test results obtained with finishing coat Baumit Nanopor Fine, floated structure, particles size 1,0 mm and Baumit NanoporColor: 0,329) THR is 5,83 mm
	Baumit StarTop Fine Baumit StarColor	No performance assessed
	Baumit PuraTop Fine Baumit PuraColor	No performance assessed
	Baumit GranoporFine Baumit GranoporColor	≤ 1,0 (test results obtained with finishing coat Baumit GranoporFine, floated structure, particles size 1,0 mm and Baumit GranoporColor: 0,484) THR is 5,56 mm
	Baumit FineTop Baumit SilikonColor	≤ 1,0 (test results obtained with finishing coat Baumit FineTop, floated structure, particles size 1,0 mm and Baumit SilikonColor: 0,476) THR is 5,82 mm
	Baumit SilikonTop Baumit FillTop	≤ 1,0 (test results obtained with finishing coat Baumit SilikonTop, floated structure, particles size 3,0 mm and Baumit FillTop: 0,896) THR is 8,2 mm
	Baumit StellaporTop Baumit SilikonColor	≤ 1,0 (test results obtained with finishing coat Baumit StellaporTop, floated structure, particles size 3,0 mm and Baumit SilikonColor: 0,670) THR is 7,83 mm

Table 22 - Water vapour permeability of rendering systems (without any key coat)

Paymit StarContact white			
Baumit StarContact white		(m)	
	Baumit GranoporTop Baumit GranoporColor	≤ 1,0 (test results obtained with finishing coat Baumit GranoporTop, floated structure, particles size 3,0 mm and Baumit GranoporColor: 0,566) THR is 7,85 mm	
	Baumit SilikonTop Baumit SilikonColor	≤ 1,0 (test results obtained with finishing coat Baumit SilikonTop, floated structure, particles size 3,0 mm and Baumit SilikonColor: 0,682) THR is 7,83 mm	
	Baumit StarTop Baumit StarColor	≤ 1,0 (test results obtained with finishing coat Baumit StarTop, floated structure, particles size 3,0 mm and Baumit StarColor: 0,631) THR is 7,7 mm	
Rendering systems: base coat indicated above + finishing coats and decorative coats indicated hereafter:	Baumit CreativTop Max Baumit CreativTop Silk	≤ 1,0 (test results obtained with finishing coat Baumit CreativTop Max, floated structure, particles size 4,0 mm and Baumit CreativTop Silk: 0,725) THR is 9,2 mm	
	Baumit StyleTop Baumit StyleColor	≤ 1,0 (test results obtained with finishing coat Baumit StyleTop, floated structure, particles size 3,0 mm and Baumit StyleColor: 0,779) THR is 7,83 mm	
	Baumit PuraTop Baumit PuraColor	≤ 1,0 (test results obtained with finishing coat Baumit PuraTop, floated structure, particles size 3,0 mm and Baumit PuraColor: 0,850) THR is 7,7 mm	
	Baumit NanoporTop Baumit NanoporColor	≤ 1,0 (test results obtained with finishing coat Baumit NanoporTop, floated structure, particles size 3,0 mm and Baumit NanoporColor: 0,289) THR is 7,83 mm	
	Baumit SilikatTop Baumit SilikatColor	≤ 1,0 (test results obtained with finishing coat Baumit SilikatTop, floated structure, particles size 3,0 mm and Baumit SilikatColor: 0,408) THR is 7,88 mm	
	Baumit SilliporTop Baumit FillTop	≤ 1,0 (test results obtained with finishing coat Baumit SiliporTop, floated structure, particles size 3,0 mm and Baumit FillTop: 0,947) THR is 8,2 mm	

Baumit Fascina Special Baumit NanoporColor	≤ 1,0 (test results obtained with finishing coat Baumit Fascina Special, floated structure, particles size 3,0 mm and Baumit NanoporColor: 0,301) THR is 7,83 mm
Baumit NanoporFine Baumit NanoporColor	≤ 1,0 (test results obtained with finishing coat Baumit Nanopor Fine, floated structure, particles size 1,0 mm and Baumit NanoporColor: 0,296) THR is 5,83 mm
Baumit StarTop Fine Baumit StarColor	No performance assessed
Baumit PuraTop Fine Baumit PuraColor	No performance assessed
Baumit GranoporFine Baumit GranoporColor	≤ 1,0 (test results obtained with finishing coat Baumit GranoporFine, floated structure, particles size 1,0 mm and Baumit GranoporColor: 0,453) THR is 5,56 mm
Baumit FineTop Baumit SilikonColor	≤ 1,0 (test results obtained with finishing coat Baumit FineTop, floated structure, particles size 1,0 mm and Baumit SilikonColor: 0,444) THR is 5,82 mm
Baumit SilikonTop Baumit FillTop	≤ 1,0 (test results obtained with finishing coat Baumit SilikonTop, floated structure, particles size 3,0 mm and Baumit FillTop: 0,866) THR is 8,2 mm
Baumit StellaporTop Baumit SilikonColor	≤ 1,0 (test results obtained with finishing coat Baumit StellaporTop, floated structure, particles size 3,0 mm and Baumit SilikonColor: 0,640) THR is 7,83 mm

- 3.3.5 Release of dangerous substances (ETAG 004 Clause 5.1.3.5, EOTA TR034)
  No performance assessed.
- 3.4 Safety and accessibility in use (BWR 4)
- 3.4.1 Bond strength between base coat and insulation product (ETAG 004 Clause 5.1.4.1.1)

# Table 23 – Bond strength between base coat Baumit StarContact and mineral wool board (MW – TR7,5)

Conditionings			
Initial state  After the hygrothermal cycles (on the rig)  After the freeze/thaw cycle (on samples)			
< 0,08 MPa*	< 0,08 MPa*	Test not required because freeze/thaw cycles not necessary	
* Failure occurred in 100 % cases in MW board.			

# Table 24 – Bond strength between base coat Baumit StarContact and mineral wool board (MW – TR15)

Conditionings			
Initial state  After the hygrothermal cycles (on the rig)  After the freeze/thaw cycles (on samples)			
< 0,08 MPa* <0,08 MPa*		Test not required because freeze/thaw cycles not necessary	
* Failure occurred in 100 % cases in MW board.			

# Table 25 – Bond strength between base coat Baumit StarContact white and mineral wool board (MW – TR7,5)

Conditionings			
Initial state	After the hygrothermal cycles (on the rig)	After the freeze/thaw cycles (on samples)	
< 0,08 MPa*	< 0,08 MPa*	Test not required because freeze/thaw cycles not necessary	
* Failure occurred in 100 % cases in MW board.			

# Table 26 – Bond strength between base coat Baumit StarContact white and mineral wool board (MW – TR15)

Conditionings			
Initial state  After the hygrothermal cycles (on the rig)  After the freeze/thaw cycles (on samples)			
< 0,08 MPa* Test not required because freeze/thaw cycles not necessary			
* Failure occurred in 100 % cases in MW board.			

## Table 27 – Bond strength between base coat Baumit StarContact and mineral wool lamella (MW – TR80)

(			
Conditionings			
Initial state	After the freeze/thaw cycles (on samples)		
≥ 0,08 MPa*		Test not required because freeze/thaw cycles not necessary	
* Failure occurred in 100 % cases in MW lamella.			

Table 28 – Bond strength between base coat Baumit StarContact white and mineral wool lamella (MW – TR80)

Conditionings			
Initial state  After the hygrothermal cycles (on the rig)		After the freeze/thaw cycles (on samples)	
≥ 0,08 MPa	< 0,08 MPa*	Test not required because freeze/thaw cycles not necessary	
≥ 0,08 MPa  * Failure occurred in 100 % cas	·		

# 3.4.2 Bond strength between adhesive and substrate/insulation product (ETAG 004 – Clauses 5.1.4.1.2 and 5.1.4.1.3)

Table 29 – Bond strength between adhesive and substrate/insulation product (MW-TR7,5, MW-TR15, MW-TR80)

		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
Baumit StarContact Baumit StarContact Speed Baumit StarContact white Baumit NivoFix Baumt StarContact forte	Concrete	≥ 0,25 MPa	≥ 0,08 MPa	≥ 0,25 MPa
	Insulation product (MW – TR7,5)	≥ 0,08 MPa	≥ 0,03 MPa	≥ 0,08 MPa
	Insulation product (MW – TR15)	≥ 0,08 MPa	≥ 0,03 MPa	≥ 0,08 MPa
Baumit SupraFix	Insulation product (MW-TR80)	≥ 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:

Table 30 - Minimal bonded surface of adhesive to substrate

	Tensile strength perpendicular to the face of the insulation product		
	≥ 7,5 kPa	≥ 15 kPa	≥ 80 kPa
Baumit StarContact			
Baumit StarContact Speed			
Baumit StarContact white	40 %	40 %	100 %
Baumit NivoFix			
Baumt StarContact forte			
Baumit SupraFix			

#### 3.4.3 Bond strength after ageing (ETAG 004 – Clauses 5.1.7.1 and 5.1.7.2)

Table 31 – Bond strength of rendering systems after ageing (MW-EN 13162-TR7,5, TR10) (ETAG 004 - Clauses 5.1.7.1 and 5.1.7.2)

Baumit StarContact		After hygrothermal cycles tested on the rig (Clause 5.1.7.1 ETAG 004) or after 7 days immersion in water + 7 days 23 °C/50% RH (on samples) (Clause 5.1.7.2 ETAG 004)	After freeze/thaw cycles
	Baumit GranoporTop**		
	Baumit SilikonTop*		
	Baumit StarTop**		
	Baumit CreativTop**		Not required
	Baumit StyleTop**		
	Baumit PuraTop**	< 0,08 MPa or Failure occurred in all cases in MW.	
	Baumit NanoporTop**		
Rendering systems:	Baumit SilikatTop*		
base coat + key coats according to Clause 1.1	Baumit SiliporTop**		
(Baumit UniPrimer and Baumit Premium Primer)	Baumit Fascina Special**		
+ finishing coats indicated hereafter:	Baumit NanoporFine**	111111111	
	Baumit StarTop Fine**		
	Baumit PuraTop Fine**		
	Baumit GranoporFine**		
	Baumit FineTop**	-	
	Baumit StellaporTop**		
	Baumit MosaikSuperfine**		
	Baumit MosaikTop**		

<sup>\*</sup> Tested according to ETAG 004, Clause 5.1.7.1, but on rig with MW-EN 13162-TR10. 
\*\* Tested according to ETAG 004, Clause 5.1.7.2. 
Failure occurred in all cases in MW.

Table 32 – Bond strength of rendering systems after ageing (MW-EN 13162-TR7,5) (ETAG 004 – Clauses 5.1.7.1 and 5.1.7.2)

(ETAG 004 - Clauses 5.1.7.1 and 5.1.7.2)				
Baumit StarContact white		After hygrothermal cycles tested on the rig (Clause 5.1.7.1 ETAG 004) or after 7 days immersion in water + 7 days 23 °C/50% RH (on samples) (Clause 5.1.7.2 ETAG 004)	After freeze/thaw cycles	
	Baumit GranoporTop**	< 0,08 MPa or		
	Baumit SilikonTop**	Failure occurred in all cases in MW.		
	Baumit StarTop	Not tested		
	Baumit CreativTop**	< 0,08 MPa		
	Baumit StyleTop**	or Failure occurred in all cases in MW.		
	Baumit PuraTop	Not tested		
	Baumit NanoporTop*			
Rendering systems: base coat +	Baumit SilikatTop**			
key coats according to Clause 1.1 (Baumit UniPrimer and Baumit	Baumit SiliporTop**	< 0,08 MPa or Failure occurred in all	Not required	
Premium Primer) +	Baumit Fascina Special**			
finishing coats indicated hereafter:	Baumit NanoporFine*	cases in MW.		
	Baumit GranoporFine**			
	Baumit FineTop**			
	Baumit StarTop Fine	Not tested		
	Baumit PuraTop Fine	ivoi iestea		
	Baumit StellaporTop*	< 0,08 MPa		
	Baumit MosaikSuperfine**	or Failure occurred in all		
	Baumit MosaikTop**	cases in MW.		
* Tested according to ETAG 004, Clause 5.1.7.1.				

Failure occurred in all cases in MW.

<sup>\*</sup> Tested according to ETAG 004, Clause 5.1.7.1.

\*\* Tested according to ETAG 004, Clause 5.1.7.2.

Table 33 – Bond strength of rendering systems after ageing (MW-EN 13162-TR7,5) (ETAG 004 – Clauses 5.1.7.1 and 5.1.7.2)

Baumit StarContact white (without any key coat)		Afte hygrothermal cycles tested on the rig (Clause 5.1.7.1 ETAG 004) or after 7 days immersion in water + 7 days 23 °C/50% RH (on samples) (Clause 5.1.7.2 ETAG 004)	After freeze/thaw cycles
	Baumit GranoporTop**		
	Baumit SilikonTop**		
	Baumit StarTop		
	Baumit CreativTop Max* Baumit CreativTop Fine*		
	Baumit StyleTop**		Not required
Rendering systems: base coat	Baumit PuraTop		
	Baumit NanoporTop**		
	Baumit SilikatTop**	< 0,08 MPa or	
	Baumit SiliporTop**		
+ finishing coats indicated hereafter:	Baumit Fascina Special**	Failure occurred in all cases in MW.	Not required
	Baumit NanoporFine*		
	Baumit StarTop Fine		
	Baumit PuraTop Fine		
	Baumit GranoporFine**		
	Baumit FineTop**		
	Baumit StellaporTop**		
	Baumit MosaikSuperfine**		
	Baumit MosaikTop*		
* Tested according to ETAG 004, Clause 5. ** Tested according to ETAG 004, Clause 5. Failure occurred in all cases in MW.	1.7.1. 1.7.2.		

Table 34 – Bond strength of rendering systems after ageing (MW-EN 13162-TR80) (ETAG 004 – Clauses 5.1.7.1 and 5.1.7.2)

Baumit StarContact		Afte hygrothermal cycles tested on the rig (Clause 5.1.7.1 ETAG 004) or after 7 days immersion in water + 7 days 23 °C/50% RH (on samples) (Clause 5.1.7.2 ETAG 004)	After freeze/thaw cycles
	Baumit GranoporTop*	< 0,08 MPa or	
	Baumit SilikonTop*	Failure occurred in all cases in MW	
	Baumit StarTop		
	Baumit CreativTop**		Not required
	Baumit StyleTop**		
	Baumit PuraTop		
	Baumit NanoporTop**		
Rendering systems: base coat	Baumit SilikatTop**		
+ key coats according to Clause 1.1 (Baumit UniPrimer and Baumit	Baumit SiliporTop**	> 0.00 MD-	
Premium Primer)	Baumit Fascina Special**	≥ 0,08 MPa	
finishing coats indicated hereafter:	Baumit NanoporFine**		
	Baumit StarTop Fine		
	Baumit PuraTop Fine		
	Baumit GranoporFine**		
	Baumit FineTop**		
	Baumit StellaporTop**		
	Baumit MosaikSuperfine**	Not tested	
	Baumit MosaikTop**	≥ 0,08 MPa	
* Tested according to ETAG 004, Clause 5. ** Tested according to ETAG 004, Clause 5.			

Table 35 – Bond strength of rendering systems after ageing (MW-EN 13162-TR80) (ETAG 004 – Clause 5.1.7.2)

Baumit StarConta	After 7 days immersion in water + 7 days 23 °C/50% RH (on samples) (Clause 5.1.7.2 ETAG 004)	After freeze/thaw cycles	
	Baumit GranoporTop	) 0 00 MD	
	Baumit SilikonTop	≥ 0,08 MPa	
	Baumit StarTop	Not tested	
	Baumit CreativTop	> 0.00 MD	
	Baumit StyleTop	≥ 0,08 MPa	
	Baumit PuraTop	Not tested	-
	Baumit NanoporTop		
Rendering systems: base coat	Baumit SilikatTop		Not required
key coats according to Clause 1.1 (Baumit UniPrimer and Baumit Premium Primer)	Baumit SiliporTop	≥ 0,08 MPa	
	Baumit Fascina Special		
+ finishing coats indicated hereafter:	Baumit NanoporFine		
	Baumit StarTop Fine	Nettested	
	Baumit PuraTop Fine	Not tested	
	Baumit GranoporFine		
	Baumit FineTop	≥ 0,08 MPa	
	Baumit StellaporTop		
	Baumit MosaikSuperfine	Not tested	
	Baumit MosaikTop	≥ 0,08 MPa	

Table 36 – Bond strength of rendering systems after ageing (MW-EN 13162-TR80) (ETAG 004 – Clause 5.1.7.2)

	Baumit StarContact white (without key coat)		
	Baumit GranoporTop		
	Baumit SilikonTop		
	Baumit StarTop		
	Baumit CreativTop		
	Baumit StyleTop		
	Baumit PuraTop		
	Baumit NanoporTop	L O CO MD	
	Baumit SilikatTop		
Rendering systems: base coat	Baumit SiliporTop	≥ 0,08 MPa	Not see the l
finishing coats indicated hereafter:	Baumit Fascina Special		Not required
, and the second	Baumit NanoporFine		
	Baumit StarTop Fine		
	Baumit PuraTop Fine		
	Baumit GranoporFine		
	Baumit FineTop		
	Baumit StellaporTop		
	Baumit MosaikSuperfine	Not tested	
	Baumit MosaikTop	≥ 0,08 MPa	

#### 3.4.4 Fixing strength (ETAG 004 – Clause 5.1.4.2)

Test not required (no limitation of ETICS length) because the ETICS fulfils the following criteria:

- The bonded area in case of MW boards exceeds 40 % in case of mechanically fixed systems with supplementary adhesive.
- The bonded area in case of using MW lamellas equal to 100 %.
- $E \times d = 10\,503\,\text{N/mm} < 50\,000\,\text{N/mm}$ , where E is modulus of elasticity of the base coat Baumit StarContact without glass fibre mesh and d is mean dried thickness of the base coat.
- $E \times d = 366,6 \text{ N/mm} < 50\,000 \text{ N/mm}$ , where E is modulus of elasticity of the base coat Baumit StarContact **white** without glass fibre mesh and d is mean dried thickness of the base coat.

#### 3.4.5 Wind load resistance (ETAG 004 – Clause 5.1.4.3)

Safety in use of mechanically fixed ETICS using anchors

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

Table 37 – Failure loads of combination of anchors described in below table and insulation product – MW-EN 13162-TR7,5 (single density product))

Anchors for which the following failure loads apply		Trade name		Anchors according to Annex 2	
		Plate diameter (mm)		≥ 60	
Characteristic of the insulation product panels for which the following failure loads apply		Thickness (mm)		≥ 60	
		Tensile strength perpendicular to the face (kPa)		≥ 7,5	
Failure	Anchors not placed at the panel joint (pull – through test)		R <sub>panel</sub> :	Minimum: Average:	300 320
(N)	(N) Anchors placed at the panel joint (pull – through test)		R <sub>joint</sub> :	Minimum: Average:	250 280

Table 38 – Failure loads of combination of anchors described in below table and insulation product – MW-EN 13162-TR7,5 (single density product)

Anchors for which the following failure loads apply		Trade name		Anchors according to Annex 2	
		Plate diameter (mm)		≥ 60	
Characteristic of the insulation product panels for which the following failure loads apply		Thickness (mm)		≥ 140	
		Tensile strength perpendicular to the face (kPa)		≥ 7,5	
Failure	Anchors not placed at the panel joint (pull – through test)		R <sub>panel</sub> :	Minimum: Average:	470 520
(N)	(N) Anchors placed at the panel joint (pull – through test)		R <sub>joint</sub> :	Minimum: Average:	390 410

Table 39 – Failure loads of combination of anchors described in below table and insulation product – MW-EN 13162-TR7,5 (dual density product)

Anchors for which the following failure loads apply		Trade name		Anchors according to Annex 2 marked with *	
		Plate diameter (mm)		≥ 60	
Characteristic of the insulation product panels for which the following failure loads apply		Thickness (mm)		≥ 60	
		Tensile strength perpendicular to the face (kPa)		≥ 7,5	
Failure	Anchors not placed at the panel joint (pull – through test)		R <sub>panel</sub> :	Minimum: Average:	380 430
(N) Anchors placed at the panel joint (pull – through test)		anel joint	Rjoint:	Minimum: Average:	290 360

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

$$R_{d} = [R_{panel} \times n_{panel} + R_{joint} \times n_{joint}] / \gamma_{m}$$

 $n_{\text{panel}}$  is number (per m<sup>2</sup>) of anchors placed at the body of the insulation product;

 $n_{joint}$  is number (per m<sup>2</sup>) of anchors placed at joints;

<sup>2</sup>/m is national safety factor.

### 3.4.6 Render strip tensile test (ETAG 004 – Clause 5.5.4.1)

Width of crack (Render Strip Tensile Strength with Baumit StarContact and Baumit StarContact white) was not performed: **no performance assessed**.

#### 3.5 Protection against noise (BWR 5)

#### 3.5.1 Airborne sound insulation (ETAG 004 – Clause 5.1.5.1)

No performance assessed.

#### 3.6 Energy economy and heat retention (BWR 6)

#### **3.6.1** Thermal resistance (ETAG 004 – Clause 5.1.6.1)

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

$$U_c = U + \chi_p.n$$

where  $\chi_p.n$  has only to be taken into account if it is greater than 0,04 W/(m<sup>2</sup>·K);

 $U_c$  global (corrected) thermal transmittance of the covered wall (W/(m<sup>2</sup>·K));

n number of anchors (through insulation product) per m<sup>2</sup>;

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 covered by plastic anchors and for anchors with an air gap at the head of the screw ( $\chi_p$ .n negligible for n < 20);

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

= negligible for anchors with plastic nails (reinforced or not with glass fibres ...); thermal transmittance of the current part of the covered wall (excluding thermal bridges) (W/ (m²·K)) determined as follows:

 $Uc = \frac{1}{R_i + R_{render} + R_{substrate} + R_{se} + R_{si}}$ 

reference to EN 13163) in (m2·K)/W;

R<sub>i</sub> thermal resistance of the insulation product (according to declaration in

R<sub>render</sub> thermal resistance of the render (about 0,02 in (m<sup>2</sup>·K)/W or determined by test according to EN 12667 or EN 12664);

 $R_{\text{substrate}}$  thermal resistance of the substrate of the building (concrete, brick ...) in  $(m^2 \cdot K)/W$ ;

R<sub>se</sub> external superficial thermal resistance in (m<sup>2</sup>·K)/W;

 $R_{si}$  internal superficial thermal resistance in (m<sup>2</sup>·K)/W.

The value of thermal resistance of each insulation product shall be given in the manufacturer's documentation along with the possible range of thicknesses. In addition, the point thermal conductivity of anchors shall be given when anchors are used in the ETICS.

#### 3.7 Sustainable use of natural resources (BWR 7)

No performance assessed.

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where

# 4 Assessment and verification of constancy of performance (hereinafter AVCP) system applied, with reference to its legal base

According to the European Commission Decision 97/556/EC amended by the European Commission Decision 2001/596/EC, the AVCP systems (further described in Annex V to Regulation (EU) No. 305/2011) 1 and 2+ apply.

Table 40 – Assessment and verification of constancy of performance system

Product(s)	Intended use(s)	Level(s) or class(es) (Reaction to fire)	System(s)
External thermal insulation composite	in external wall subject to fire regulations	A1 <sup>(1)</sup> , A2 <sup>(1)</sup> , B <sup>(1)</sup> , C <sup>(1)</sup>	1
systems/kits (ETICS) with rendering		A1 <sup>(2)</sup> , A2 <sup>(2)</sup> , B <sup>(2)</sup> , C <sup>(2)</sup> , D, E, (A1 to E) <sup>(3)</sup> , F	2+
	in external wall not subject to fire regulations	any	2+

<sup>(1)</sup> Products/materials for which a clearly identifiable stage in the production process results in an improvement of the reaction to fire classification (e.g. an addition of fire retardants or a limiting of organic material).

# 5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

In order to help the Notified Body to make an evaluation of conformity, the Technical Assessment Body issuing the ETA shall supply the information detailed below. This information together with the requirements given in EC Guidance Paper B will generally form the basis on which the factory production control (FPC) is assessed by the Notified Body.

This information shall initially be prepared or collected by the Technical Assessment Body and shall be agreed with the manufacturer. The following gives guidance on the type of information required:

#### 1) The ETA

Where confidentiality of information is required, this ETA makes reference to the manufacturer's technical documentation which contains such information.

#### 2) Basic manufacturing process

The basic manufacturing process is described in sufficient detail to support the proposed FPC methods.

The different components of ETICS are generally manufactured using conventional techniques. Any critical process or treatment of the components which affects performance are highlighted in the manufacturer's documentation.

#### 3) Product and materials specifications

The manufacturer's documentation includes:

- detailed drawings (possibly including manufacturing tolerances);
- incoming (raw) materials specifications and declarations;
- references to European and/or International Standards;
- technical data sheets.

<sup>(2)</sup> Products/materials not covered by footnote (1).

<sup>(3)</sup> Products/materials that do not require to be tested for reaction to fire (e.g. Products/materials of Classes A1 according to Commission Decision 96/603/EC).

#### 4) Control Plan (as a part of FPC)

The manufacturer and the Technický a skúšobný ústav stavebný, n. o. have agreed a Control Plan which is deposited with the Technický a skúšobný ústav stavebný, n. o. in documentation which accompanies the ETA. The Control Plan specifies the type and frequency of checks/tests conducted during production and on the final product. This includes the checks conducted during manufacture on properties that cannot be inspected at a later stage and for checks on the final product.

Products not manufactured by the ETICS manufacturer shall also be tested according to the Control Plan. It must be demonstrated to the Notified Body that the FPC system contains elements securing that the ETICS manufacturer takes products conforming to the Control Plan from his supplier(s).

Where materials/components are not manufactured and tested by the supplier in accordance with agreed methods, then where appropriate they shall be subject to suitable checks/tests by the ETICS manufacturer before acceptance.

In cases where the provisions of the European Technical Assessment and its Control Plan are no longer fulfilled, the Notified Body shall withdraw the certificate and inform Technický a skúšobný ústav stavebný, n. o. without delay.

#### Technický a skúšobný ústav stavebný, n. o.

Building Testing and Research Institute Studená 3, 821 04 Bratislava, Slovak Republic

On behalf of the Technický a skúšobný ústav stavebný, n. o. Bratislava, 25 November 2019

prof. Ing. Zuzana Sternová, PhD. Head of Technical Assessment Body

#### **Annexes**

Annex 1	Insulation product characteristics
Annex 2	Description and characteristics of the anchors
Annex 3	Description and characteristics of the reinforcement
Annex 4	Correspondence between trade names used for components of ETICS "Baumit StarSystem MW"
Annex 5	Possibility of combination finishing coats and decorative coats of ETICS "Baumit StarSystem MW"

## Insulation product characteristics

Table 41 - Characteristics of the insulation product(s)

Description and characteristics		MW board "Baumit MineralTherm" (single density product) NOTE: Baumit MineralTherm is produced by manufacturers which are listed in Control Plan as a confidential part of ETA issued for "Baumit Beteiligungen GmbH".  for mechanically fixed ETICS with anchors	
Reaction to fire / STN I	EN 13501-1	Euroclass A1 (thickness from 60 to 300 mm, density from 90 to 116,5 kg/m³)	
Thermal resistance ((m	n <sup>2</sup> ·K)/W)	Defined in the CE marking in reference to EN 13162	
		$\lambda_{\text{ins}}$ : < 0,036 W/(m·K) (declared value)	
Thickness (mm) / EN 8	23	MW - EN 13162 – <b>T5</b>	
Length (mm) / EN 822		MW - EN 13162 – ± 2 %	
Width (mm) / EN 822		MW - EN 13162 – ± 1,5 %	
Squareness (mm) / EN	824	MW - EN 13162 - ≤ 5 mm/m	
Flatness (mm) / EN 82	5	MW - EN 13162 - ≤ 6 mm	
Surface condition		Cut surface (homogeneous and with or without "skin")	
Dimensional stability under	specified temperature and humidity / EN 1604	No performance assessed	
	laboratory condition / EN 1603	MW - EN 13162 – <b>DS(TH)</b>	
Compressive stress or (kPa) / EN 826	compressive strength	MW - EN 13162 - CS(10)20	
Tensile strength perpe		≥ 7,5 kPa, MW - EN 13162 – TR7,5	
dry conditions / EN 160	)7	≥ 10 kPa, MW - EN 13162 – TR10	
Short term water absorption by partial immersion / EN 1609		MW - EN 13162 – WS, WL(P)	
Water vapour diffusion resistance factor (μ) / EN 12086		MW - EN 13162 – MU1	
Shear strength (N/mm²	²) / EN 12090	7	
Shear modulus (N/mm		_	

Table 42 - Characteristics of the insulation product(s)

Description and characteristics		MW board "Baumit MineralTherm" (dual density product) NOTE: Baumit MineralTherm is produced by manufacturers which are listed in Control Plan as a confidential part of ETA issued for "Baumit Beteiligungen GmbH".  for mechanically fixed ETICS with anchors	
Reaction to fire / STN I	EN 12501 1	Euroclass A1	
Reaction to file / STN I		(thickness from 60 to 300 mm, density from 90 to 116,5 kg/m <sup>3</sup> )	
Thermal resistance ((m	<sup>2</sup> ·K)/W)	Defined in the CE marking in reference to EN 13162	
		$\lambda_{\text{ins}}$ : < 0,036 W/(m·K) (declared value)	
Thickness (mm) / EN 8	23	MW - EN 13162 – <b>T5</b>	
Length (mm) / EN 822		MW - EN 13162 – ± 2 %	
Width (mm) / EN 822		MW - EN 13162 – ± 1,5 %	
Squareness (mm) / EN 824		MW - EN 13162 - ≤ 5 mm/m	
Flatness (mm) / EN 82	5	MW - EN 13162 - ≤ 6 mm	
Surface condition		Cut surface (homogeneous and with or without "skin")	
Dimensional stability under	specified temperature and humidity / EN 1604	No performance assessed	
	laboratory condition / EN 1603	MW - EN 13162 – <b>DS(TH)</b>	
Compressive stress or (kPa) / EN 826	compressive strength	MW - EN 13162 - CS(10)15	
Tensile strength perper dry conditions / EN 160		≥ 7,5 kPa, MW - EN 13162 – TR7,5	
•		≥ 10 kPa, MW - EN 13162 – TR10	
Short term water absorption by partial immersion / EN 1609		MW - EN 13162 – WS, WL(P)	
Water vapour diffusion resistance factor ( $\mu$ ) / EN 12086		MW - EN 13162 – MU1	
Shear strength (N/mm²	) / EN 12090	-	
Shear modulus (N/mm <sup>2</sup>	<sup>2</sup> ) / EN 12090	_	

Table 43 – Characteristics of the insulation product(s)

Description and characteristics		MW board "Baumit MineralTherm Lamella" NOTE: Baumit MineralTherm Lamella is produced by manufacturers which are listed in Control Plan as a confidential part of ETA issued for "Baumit Beteiligungen GmbH".  for fully bonded ETICS with supplementary anchors	
Reaction to fire / STN E	EN 13501-1	Euroclass A1 (thickness from 60 to 300 mm, density from 78 to 116,5 kg/m³)	
Thermal resistance ((m	<sup>2</sup> ·K)/W)	Defined in the CE marking in reference to EN 13162  λ <sub>ins</sub> : < 0,042 W/(m·K) (declared value)	
Thickness (mm) / EN 8	23	MW - EN 13162 – <b>T5</b>	
Length (mm) / EN 822		MW - EN 13162 - ± 2 %	
Width (mm) / EN 822		MW - EN 13162 - ± 1,5 %	
Squareness (mm) / EN 824		MW - EN 13162 – ≤ 5 mm/m	
Flatness (mm) / EN 825	5	MW - EN 13162 - ≤ 6 mm	
Surface condition		Cut surface (homogeneous and without "skin")	
Dimensional stability under	specified temperature and humidity / EN 1604	MW - EN 13162 – <b>DS(T+)</b> -	
	laboratory condition / EN 1603	MW - EN 13162 – <b>DS(TH)</b>	
Compressive stress or (kPa) / EN 826	compressive strength	MW - EN 13162 - <b>CS(10)40</b>	
Tensile strength perpendicular to the faces in dry conditions / EN 1607		MW - EN 13162 – TR80	
Short term water absorption by partial immersion / EN 1609		MW – EN 13162 – WS, WL(P)	
Water vapour diffusion resistance factor ( $\mu$ ) / EN 12086		MW – EN 13162 – MU1	
Shear strength (N/mm²	) / EN 12090	min. 0,02 N/mm2	
Shear modulus (N/mm²	<sup>2</sup> ) / EN 12090	min. 1,0 N/mm2	

## **Description and characteristics of anchors**

Table 44 – References to ETAs for anchors used in ETICS

Page vintion Dista Characteristic									
Trade name	Description Plate stiffness/Load resistance of the anchor plate	Plate diameter mm	Characteristic resistance in substrate stated in						
EJOT ejotherm NTK U	Nailed-in plastic anchor with polyamide nail and plastic head 0,5 kN/mm/1,4 kN Use of category: A, B, C	60	ETA-07/0026						
Ejot H1 eco	Nailed-in plastic anchor with steel nail 0,6 kN/mm/1,4 kN Use of category: A, B, C	60	ETA-11/0192						
Ejot H4 eco	Nailed-in plastic anchor with polyamide nail 0,6 kN/mm/1,4 kN Use of category: A, B, C, D, E	60	ETA-11/0192						
EJOT H3	Nailed-in plastic anchor with polyamide nail 0,6 kN/mm/1,25 kN Use of category: A, B, C	60	ETA 14/0130						
Ejotherm STR U* Ejotherm STR U 2G*	Screwed-in plastic anchor with steel screw and plastic head 0,6 kN/mm/2,08 kN Use of category: A, B, C, D, E	60	ETA-04/0023						
ejotherm NT U* ejotherm NK U*	Nailed-in plastic anchor with steel nail 0,6 kN/mm/2,43 kN Use of category: A, B, C	60	ETA-05/0009						
Hilti SD-FV 8 with doublehead HDT-FV90*	Nailed-in plastic anchor with polyamide nail 0,3 kN/mm/1,55 kN Use of category: A, B, C	60	ETA-03/0028						
Hilti HTR-P Hilti HTR-M	Screwed-in plastic anchor with screw of polyamide (HTR-P) and with of steel and polyamide (HTR-M) 0,6 kN/mm/1,4 kN Use category: A, B, C, D, E	60	ETA 16/0116						
Hilti ETICS-Anchor D-FV* Hilti ETICS-Anchor D-FV T*	Screwed-in plastic anchor with steel screw 0,8 kN/mm/1,93 kN Use of category: A, B, C, D, E	60	ETA-05/0039						
Hilti fixing element XI-FV	plastic part made of polyethylene 0,4 kN/mm/1,6 kN	60	ETA-03/0004						
Hilti D8-FV* (used only with thermal insulation bigger than 100 mm)	Screwed-in plastic anchor with screw of galvanised steel 0,63 kN/mm/3,16 kN Use of category: A, B, C, D, E Used for thickness of MW from 100 mm	60	ETA-07/0288						
Hilti SX-FV	Fixing element from polyethylene with sleeve from stainless steel 0,7 kN/mm/1,73 kN Use of category: A, B, C	60	ETA-03/0005						

Hilti SDX 8	Nailed in plastic anchor with nail made from polyamide 0,6 kN/mm/1,6 kN Use of category: A, B, C, D, E	60/65	ETA 14/0399
Hilti SDK-FV 8	Nailed in plastic anchor with nail made from polyamide 0,5 kN/mm/1,48kN Use of category: A, B, C	60	ETA-07/0302
R-TFIX-8M	nailed-in anchor with nail of galvanised steel 1,0 kN/mm/1,53 kN Use of category: A, B, C, D, E	60	ETA 17/0592
R-TFIX 8S*	Screwed-in anchor with screw of galvanised steel 0,6 kN/mm/2,04 kN Use of category: A, B, C, D, E	60	ETA 17/0161
KOELNER TFIX-8P	Nailed-in plastic anchor with nail of galvanised steel 0,3 kN/mm/1,38 kN Use of category: A, B, C, D, E	60	ETA-13/0845
KOELNER KI-10N KOELNER KI-10NS	Nailed-in plastic anchor with steel nail 0,5 kN/mm /1,23 kN Use of category: B, C, D, E (for KOELNER KI-10N) Use of category: A, B, C, D, E (for KOELNER KI-10NS)	60	ETA-07/0221
KI-10, KI-10PA KI-10M	Nailed-in plastic anchor with polypropylene nail 0,5 kN/mm/2,1 kN (for KI-10, KI-10PA) 0,4 kN/mm/2,6 kN (for KI-10M) Use of category: A, B, C, D, E	60	ETA-07/0291
Fischer Termoz 8 N Fischer Termoz 8 NZ	Nailed-in plastic anchor with steel nail 0,5 kN/mm/1,34 kN Use of category: A, B, C (for Fischer Termoz 8 N) Use of category: A, B, C, D (for Fischer Termoz 8 NZ)	60	ETA-03/0019
Fischer Termoz CN 8	Nailed-in polypropylene anchor 0,4 kN/mm/1,6 kN Use of category: A, B, C, D	60	ETA-09/0394
Fischer Termoz 8 SV*	Screwed-in anchor with screw of galvanised steel 1,1 kN/mm/2,13 kN Use of category: A, B, C, D, E	60	ETA-06/0180
Fischer Termoz 8 U Fischer Termoz 8 UZ	Screwed-in plastic anchor with steel screw and plastic head 0,5 kN/mm/2,45 kN Use of category: A, B, C, E (valid for Fischer Termoz 8 U) Use of category: A, B, C, D (valid for Fischer Termoz 8 U)	60	ETA-02/0019
Fischer Termoz PN8	Nailed-in plastic anchor with polyamide nail 0,4 kN/mm/1,6 kN Use of category: A, B, C	60	ETA-09/0171
KEW TSD-V	Nailed in anchor with galvanized steel nail 1,24 kN/mm/1,75 kN Use of category: A, B, C	60	ETA-08/0315
KEW TSBD*	Nailed in anchor with galvanized steel nail 1,6 kN/mm/2,22 kN Use of category: A, B, C, D	60	ETA-08/0314

KEW TSD 8	Nailed in anchor with galvanized steel nail 0,6 kN/mm/1,6 kN Use of category: A, B, C, D	60	ETA-04/0030
Baumit S SchraubDübel/ Baumit N SchlagDübel	Screwed-in plastic anchor with galvanized or stainless steel screw (Baumit S) and nailed-in plastic anchor with galvanized steel overmolded with polyamide (Baumit N)  1,5 kN/mm/2,7 kN Use category (Baumit S): A, B, C, D, E Use category (Baumit N): A, B, C, D, E	60	ETA 17/0078
Baumit SDX 8	Nailed in plastic anchor with nail made from polyamide 0,6 kN/mm/1,6 kN Use of category: A, B, C, D, E	60/65	ETA 14/0399
Bravoll PTH-KZ 60/8/Bravoll PTH 60/8*	Nailed-in plastic anchor with (polyamide – PTH) (steel – PTH-KZ) nail and plastic head 0,4 kN/mm/1,8 kN Use of category (Bravoll PTH 60/8): A, B Use of category (Bravoll PTH-KZ 60/8): A, B, C, D	60	ETA-05/0055
Bravoll PTH-S 60/8	Screwed-in plastic anchor with steel screw 0,9 kN/mm/2,6 kN Use of category: A, B, C, D, E	60	ETA-08/0267
Bravoll PTH-KZ* Bravoll PTH-KZL Bravoll PTH* Bravoll PTH-L	Nailed-in plastic anchor with polyamide (PTH-KZ) (steel – PTH-KZ) nail and plastic head 0,4 kN/mm/1,8 kN Use of category (Bravoll PTH 60/8): A, B Use of category (Bravoll PTH-KZ 60/8): A, B, C, D	60	ETA-05/0055
Bravoll PTH-S 60/8-La	Screwed-in plastic anchor with steel screw 0,9 kN/mm/2,6 kN Use of category: A, B, C, D, E	60	ETA-08/0267
Bravoll PTH SX	Screwed-in plastic anchor with plastic screw 0,5 kN/mm/1,8 kN Use of category: A, B, C, D, E	60	ETA-10/0028
Bravoll PTH X Bravoll PTH-EX	Nailed-in plastic anchor with polyamide (PTH X) or steel screw (PTH-EX) 0,6 kN/mm/1,5 kN Use of category: A, B, C, D	60	ETA 13/0951
IsoFux NDS8Z* IsoFux NDS90Z IsoFux NDM90Z IsoFux NDM8Z	Nailed-in plastic anchor with steel screw 0,9 kN/mm/2,2 kN Use of category: A, B, C	60	ETA-07/0129
IsoFux Rocket*	Screwed-in plastic anchor with steel screw 1,1 kN/mm/2,5 kN Use of category: A, B, C, E	60	ETA-12/0093

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Top Kraft PSK	Nailed-in plastic anchor with nail of galvanized steel 0,7 kN/mm/1,9 kN Use category: A, B, C	60	ETA 15/0463
Top Kraft PSV	Screwed-in plastic anchor with screw of galvanized steel 0,8 kN/mm/1,1 kN Use category: A, B, C, D, E	60	ETA 16/0120
Top Kraft PPV	Screwed-in plastic anchor with screw of galvanized zinc coated steel 0,7 kN/mm/1,4 kN Use category: A, B, C, E	60	ETA 15/0244
JANSA PTP SR 8/60-La	Screwed-in plastic anchor with metal screw 1,5 kN/mm/2,0 kN Use category: A, B, C, D, E	60	ETA 15/0214

## Description and characteristics of the reinforcement

Table 45 – Description and characteristics of the reinforcement

Mesh trade name	Description	Alkalis resistance (5.6.7.1 of ETAG 004)							
		Residual strength after ageing (N/mm)		ageing resistand					
		Warp Weft		Warp	Weft				
Baumit StarTex/	Standard mesh:	≥ 20							
Baumit Textilglasgitter/ Baumit ProTex	Mass per unit area: min. 145 g/m²			≥ 50					
	Standard mesh:								
Baumit StarTex (160)	Mass per unit area: min. 160 g/m <sup>2</sup>	≥ 20		≥ 50					
Baumit StrongTex	Standard mesh:  Mass per unit area: min. 300 g/m²	≥ 20		≥ 20		≥ 20		≥ !	50

# Annex 4 Correspondence between trade names used for components of ETICS "Baumit StarSystem MW"

	Baumit	StarCor	ntact	Bau	mit Kle	ebeSpachtel	
,	Baumit StarContact Baumi			· · · · · · · · · · · · · · · · · · ·			
	Speed		SpeedKleb	eSpachtel		ımit SpeedContact	
Adhesive	Baumit StarCon white	tact	Baumit StarContact KBM			Baumit KlebeSpachtel KBM	
	Baumit NivoF	ix	Baumit PaneloFix		Baun	nit WDVS-Kleber	
	Baumit Sta	arConta	ct forte	Baumit Di	ckschi	chtKlebespachtel	
	Baum	it Supral	Fix	Baı	umit Sı	upraKleber	
Insulation board	Baumit N	/lineralT	herm	Baumit Fass	sadend	dämmplatte Mineral	
Insulation board		[	Baumit Mineral	Therm Lamella	l		
	Baumit	StarCor	ntact	Bau	mit Kle	ebeSpachtel	
Base coat	Baumit StarCon white	tact	Baumit StarC	ontact KBM	Baun KBM	nit KlebeSpachtel	
	Baumit StarTe	ex	Baumit Text	tilglasgitter	Baun	nit ProTex	
Glass fibre mesh			Baumit Sta	rTex (160)			
			Baumit St	rongTex			
Kan aaata	Baumi	t UniPrir	ner	Baur	nit Uni	versalGrund	
Key coats	Baumit PremiumF	Primer	Baumit Premium	Primer DG 27	Baun Deco	nit rGrundierung DG 27	
	Baumit GranoporTop			Baumit GranoporPutz			
	Baumit SilikonTop			Baumit SilikonPutz			
	Baumit StarTop						
	Baumit CreativTop						
	Baumit StyleTop Baumit A		ArtlineTop	Baun	nit ArtlinePutz		
	Baumit PuraTop						
	Baumit N	Тор	Baumit NanoporPutz				
	Baumit	SilikatT	ор	Baumit SilikatPutz			
	Baumit	SiliporT	ор	Ва	umit S	iliporPutz	
Finishing coats	Baumit Fascina Special		mit Classico Special	Baumit Edelputz Spezial		Baumit ScheibenPutz SEP	
	Baumit N	Vanopor	Fine	Baum	it Nanc	pporTop Fine	
			Baumit Sta	rTop Fine			
			Baumit Pur	aTop Fine			
		Granop	orFine				
	Baumit FineTop Baumit Sil		likonFine	Baun	nit UniTop Fine		
	Baumit StellaporTop						
	Baumit MosaikTop						
	Baumit MosaikSuperfine						

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	Baumit CreativTop S-Fine	Baumit CreativTop Silk			
Decorative coat/plaster	Baumit FillTop	Baumit UniTop Fill			
	Baumit Creat	tivTop Pearl			
	Baumit NanoporColor	Baumit NanoporFarbe			
	Baumit SilikonColor	Baumit SilikonFarbe			
	Baumit S	tarColor			
	Baumit PuraColor	Baumit ProColor			
	Baumit SilikatColor	Baumit SilikatFarbe			
Decorative coat/paint	Baumit StyleColor	Baumit ArtlineFarbe			
	Baumit GranoporColor	Baumit GranoporFarbe			
	Baumit Glitter				
	Baumit Metallic				
	Baumit Finish				
	Baumit Lasur				

Possibility of combination finishing coats and decorative coats of ETICS "Baumit StarSystem MW"

	Baumit NanoporColor	Baumit StarColor	Baumit SilikonColor	Baumit SilikatColor	Baumit PuraColor	Baumit GranoporColor	Baumit StyleColor
Baumit NanoporTop	×	×	×	×	×	×	×
Baumit StarTop	×	×	×		×	×	×
Baumit StyleTop	×	×	×		×	×	×
Baumit PuraTop	×	×	×		×	×	×
Baumit openTop	×	×	×	×	×	×	×
Baumit SilikonTop	×	×	×		×	×	×
Baumit SilikatTop	×	×	×	×	×	×	×
Baumit SiliporTop	×	×	×		×	×	×
Baumit StellaporTop	×	×	×		×	×	×
Baumit GranoporTop	×	×	×		×	×	×
Baumit CreativTop	×	×	×		×	×	×
Baumit FineTop	×	×	×		×	×	×
Baumit NanoporTop Fine	×	×	×	×	×	×	×
Baumit StarTop Fine	×	×	×		×	×	×
Baumit PuraTop Fine	×	×	×		×	×	×
Baumit GranoporFine	×	×	×		×	×	×

	Baumit Metallic	Baumit Lasur	Baumit Glitter	Baumit Finish	Baumit CreativTop Silk	Baumit CreativTop Pearl	Baumit FillTop
Baumit NanoporTop	×	×	×		×	×	×
Baumit StarTop	×	×	×		×	×	×
Baumit StyleTop	×	×	×		×	×	×
Baumit PuraTop	×	×	×		×	×	×
Baumit openTop	×	×	×		×	×	×
Baumit SilikonTop	×	×	×		×	×	×
Baumit SilikatTop	×	×	×		×	×	×
Baumit SiliporTop	×	×	×		×	×	×
Baumit StellaporTop	×	×	×		×	×	×
Baumit GranoporTop	×	×	×		×	×	×
Baumit CreativTop	×	×	×		×	×	×
Baumit FineTop	×	×	×		×	×	×
Baumit NanoporTop Fine	×	×	×		×	×	×
Baumit StarTop Fine	×	×	×		×	×	×
Baumit PuraTop Fine	×	×	×		×	×	×
Baumit GranoporFine	×	×	×		×	×	×
Baumit MosaikTop				×			
Baumit MosaikSuperFine				×			