



Austrian Institute of Construction Engineering  
Schenkenstrasse 4 | T+43 1 533 65 50  
1010 Vienna | Austria | F+43 1 533 64 23  
www.oib.or.at | mail@oib.or.at



# European Technical Assessment

**ETA-20/0714**  
of 15.11.2025

General part

**Technical Assessment Body issuing the European Technical Assessment:**

Österreichisches Institut für Bautechnik (OIB)  
Austrian Institute of Construction Engineering

**Trade name:**

RÖFIX WOFITHERM WOOD  
HASIT HWF WDVS EcoWall  
FIXITherm.diffu, FIXITherm.wood  
KREISEL HW-Wärmedämmverbundsystem TFB  
GREUTOL GreoTherm System HF, HF-KR und HF-WP

**Product family to which the construction product belongs:**

External Thermal Insulation Composite Systems with rendering for the use as external insulation to walls of buildings.

**Manufacturer:**

FIXIT Trockenmörtel Holding AG  
Zugerstrasse 8A  
6342 Baar  
SWITZERLAND

**Manufacturing plant(s) of:**

Werk 1: RÖFIX; A-6832 Röthis  
Werk 2: HASIT; D-85356 Freising  
Werk 3: HASIT; CZ-34101 Hordazdovice  
Werk 4: HASIT; SK-90055 Lozorno  
Werk 5: HASIT; RO-401114 Turda  
Werk 6: KREISEL; PL-60462 Poznan  
Werk 7: FIXIT; CH-5113 Holderbank  
Werk 8: GREUTOL; CH-8112 Otelfingen

**This European Technical Assessment contains:**

20 pages including 1 Annex

**This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of:**

European Assessment Document (EAD)  
040089-00-0404 "ETICS with renderings for the use on timber frame buildings"

The European Technical Assessment is issued by the Technical Assessment Body in its official language. Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and shall be identified as such.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full. However, partial reproduction may only be made with the written consent of the issuing Technical Assessment Body. Any partial reproduction shall be identified as such.

This European Technical Assessment may be withdrawn by the issuing Technical Assessment Body, in particular pursuant to information by the Commission in accordance with Article 25(3) of Regulation (EU) No 305/2011.

electronic copy  
electronic copy  
electronic copy  
electronic copy  
electronic copy  
electronic copy  
electronic copy

Specific parts

## 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 wood fibre (WF) insulation product to be bonded and mechanically fixed onto a wall. 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, etc.) to treat details of ETICS (connections, apertures, corners, parapets, sills, etc.). 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 a part of the kit.

### 1.2 Composition of the kit

#### 1.2.1 Composition of the ETICS

	Components	Coverage (kg/m <sup>2</sup> )	Thickness (mm)
<b>Insulation materials with associated methods of fixing</b>	<b>Mechanically fixed ETICS with anchors or staples</b>		
	➤ Insulation product: factory-prefabricated wood fibre (WF)	-	20 to 240
	➤ Fixings: - <b>tested in support with EN 1382</b> - <b>“Withdrawal capacity of timber fasteners”</b> - <b>Staples</b>	/ /	/ /
<b>Base coat</b>	Aggregates, cement, sand, synthetic resin dispersion powder, additives: - <b>[IA 680], [IA 675]</b>  - <b>[IA 710], [IA 670]</b>  - <b>[IA 720], [IA 670]</b>	4,5 to 10,0 (powder) 3,5 to 6,0 (powder) 3,5 to 6,0 (powder)	3,0 to 12,0  3,0 to 8,0  3,0 to 8,0
<b>Glass fibre mesh</b>	➤ Standard glass fibre mesh: Mesh size between 3 mm and 7 mm: - <b>[IG 342], [IG 345]</b>	/	/
<b>Key coat</b>	Organic based with mineral fillers and pigments: - <b>[SP 300]</b>	0,25 (liquid)	/
	- <b>[SP 310]</b>	0,25 (liquid)	/

	Components	Coverage (kg/m <sup>2</sup> )	Thickness (mm)
Finishing coat	<ul style="list-style-type: none"> <li>➤ Lime-cement based powder: particle size 0,7/1,0/1,5/2,0/3,0/4,0/7,0/10,0 mm <b>[SE 714], [SE 715]</b> <b>[SE 716], [SE 717]</b> <b>[SE 750],</b> <b>[SE 799]</b> <b>[SE 773]</b></li> </ul>	2,0 to 7,0 (powder) 2,0 to 7,0 (powder) 2,0 to 7,0 (powder) 2,0 to 7,0 (powder) 1,8 to 24,0 (powder)	Regulated by particle size
	<ul style="list-style-type: none"> <li>➤ Ready to use paste – silicate binder: Particle size 1,0/1,5/2,0/3,0/6,0 mm <b>[SE 210]</b></li> </ul>	2,4 to 5,5 (paste)	
	<ul style="list-style-type: none"> <li>➤ Ready to use paste – acryl and silicon resin: particle size 1,0/1,5/2,0/3,0/6,0 mm <b>[SE 310]</b> Ready to use paste – acryl and silicon resin: particle size 1,0/1,5/2,0/3,0 mm <b>[SE 410]</b></li> </ul>	2,4 to 4,0 (paste) 2,4 to 4,0 (paste)	Regulated by particle size
	<ul style="list-style-type: none"> <li>➤ Ready to use paste – silicate binder/silicon resin: Particle size 0,5/0,7/1,0/1,5/2,0/3,0/4,0/6,0 mm <b>[SE 510]</b></li> </ul>	2,4 to 5,5 (paste)	
	<ul style="list-style-type: none"> <li>➤ Ready to use paste – silicate binder/silicon resin: Particle size 0,7 mm <b>[SE 520]</b>  Particle size 0,4 mm - <b>[SE 530]</b></li> </ul>	2,4 (paste)  2,4 (paste)	
	<ul style="list-style-type: none"> <li>➤ Ready to use finishing paint Silicon emulsion and water based acrylic binder, aggregates, additives: - <b>[PE 410], [PE 419], [PE 429]</b></li> </ul>	0,2 to 0,4 l (liquid)	
	Finishing paint	<ul style="list-style-type: none"> <li>➤ Silicate emulsion and water based acrylic binder, aggregates, additives: - <b>[PE 229]</b></li> </ul>	0,2 to 0,4 l (liquid)
<ul style="list-style-type: none"> <li>➤ Silicate emulsion, silicon resin emulsion, water based acrylic binder, aggregates, additives: - <b>[PE 516], [PE 519]</b></li> </ul>		0,2 to 0,4 l (liquid)	
<ul style="list-style-type: none"> <li>➤ Silicate emulsion, silicon resin emulsion, water based acrylic binder, aggregates, additives: - <b>[PE 319]</b></li> </ul>		0,2 to 0,4 l (liquid)	

## 1.2.2 Characteristics of the insulation product

Descriptions and characteristics	“180er-Platte”
Reaction to fire / EN 13501-1	Euroclass E - Thickness: 20 mm to 180 mm - density: 180 kg/m <sup>3</sup>
Thermal resistance (m <sup>2</sup> .K)/W)	Defined in CE marking according to EN 13171
Designation Code	WF-EN13171-T4-CS(10\Y)150-TR30-WS1,0-AF100-MU3
Water absorption (partial immersion) / EN 1609	≤ 1,0 kg/m <sup>2</sup>
Water vapour diffusion resistance factor / EN 12086	μ ≤ 3

Descriptions and characteristics	“140er-Platte”
Reaction to fire / EN 13501-1	Euroclass E - Thickness: 20 mm to 240 mm - density: 140 kg/m <sup>3</sup>
Thermal resistance (m <sup>2</sup> .K)/W)	Defined in CE marking according to EN 13171
Designation Code	WF-EN13171-T4-CS(10\Y)100-TR20-WS1,0-AF75-MU3
Water absorption (partial immersion) / EN 1609	≤ 1,0 kg/m <sup>2</sup>
Water vapour diffusion resistance factor / EN 12086	μ ≤ 3

Descriptions and characteristics	“110er-Platte”
Reaction to fire / EN 13501-1	Euroclass E - Thickness: 60 mm to 240 mm - density: 110 kg/m <sup>3</sup>
Thermal resistance (m <sup>2</sup> .K)/W)	Defined in CE marking according to EN 13171
Designation Code	WF-EN13171-T4-CS(10\Y)50-TR10-WS1,0-AF50-MU3
Water absorption (partial immersion) / EN 1609	≤ 1,0 kg/m <sup>2</sup>
Water vapour diffusion resistance factor / EN 12086	μ ≤ 3

## 1.2.3 Fixings

## 1.2.3.1 Anchors for insulation products:

Product	Plate diameter (mm)	characteristic resistances in the wooden substrate (solid wood)
Timber fastener	≥ 60	0,133 kN

The given characteristic depends on the building and may therefore fluctuate. If the insulation product is installed on a substrate acc. to clause 2, the mechanically fixation shall be done through this substrate into the wooden frame construction (solid) with a depth of anchoring of at least 25 mm.

## 1.2.3.2 Staples for insulation products:

Product	Staples width (mm)	characteristic resistances in the wooden substrate (solid wood)
Staples	> 26	0,05 kN

If the insulation product is installed on a substrate according to clause 2, the mechanical fixation shall be done through this substrate into the wooden frame construction (solid) with a depth of anchoring of at least 30 mm.

#### 1.2.4 Glass fibres mesh

IG 342], [IG 345]	warp direction	weft direction	acceptance criteria
mean of the tensile strength in N/50mm	1.800 – 2.450	1.800 – 2.500	–
mean of the tensile strength in N/50mm after ageing	1.000 – 1.250	1.000 – 1.450	–
tearing strength after ageing in %	50 - 66 %	50 - 70 %	≥ 50 %
tearing strength after ageing in N/mm	20,0 - 25,0 N/mm	20,0 - 29,0 N/mm	≥ 20 N/mm

A detailed list of the glass fiber meshes is given in the factory control plan of the manufacturer.

### 1.3 Manufacturing

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

### 1.4 Design and installation

The installation instructions including special installation techniques and provisions for the qualification 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 of performance are done taking into account general assumptions introduced in the EAD 040089-00-0404, which summarizes 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.

### 1.5 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.

### 1.6 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 the responsibility of the manufacturer(s) to ensure that this information is made know to the concerned people.

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

The ETICS are designed to give the timber frame building wall to which they are applied additional thermal insulation and protection from effects of weathering.

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

The surface for the application of ETICS can be a board substrate (wood-based panels, solid wood panels, plasterboards, gypsum bonded boards, cement bonded boards, etc.). The substrate has to be strong, dry and free of loose material. It may be necessary to protect the substrate against wetting and weathering before the application of the ETICS.

The thickness of the panels has to be superior or equal to 10 mm. The wooden based board substrate must be suitable for humid conditions as specified in EN 13986.

ETICS are non-load-bearing construction elements. They do not contribute directly to the stability of the timber frame building wall on which they are installed. The verification of the structural capacities of the wall and their suitability for the application of ETICS shall be in accordance with EAD 340308-00-0203 using calculation methods (EN 1995-1-1, Eurocode 5 Part 1-1, etc) as well as verifications by testing (EN 380, EN 594, EN 595, EN 596, etc.) where the load bearing capacity is unable to calculate.

The ETICS can contribute to the durability of a timber frame building by providing enhanced protection from the effects of weathering.

ETICS are not intended to ensure the air tightness of the timber frame building structure. The timber frame building wall as such has therefore to be airtight to:

- a) reduce the thermal transmittance of the wall
- b) avoid interstitial condensation due to convection

## 3. Performance of the product and references to the methods used for its assessment

### 3.1 Reaction to fire

Configurations	Organic content	Flame retardant content	Euroclass according to EN 13501-1
Base coat according to clause 1.2.1	≤ 4,9 %	no flame retardant	B – s1, d0
WF panel	Euroclass E - Thickness: 20 mm to 240 mm - Density: 110 to 180 kg/m <sup>3</sup>		
Anchors	-	-	
<b>Rendering system</b> Base coat with finishing coat and compatible key coat in clause 1.2:			
Primer according to clause 1.2.1	≤ 29,5 %	no flame retardant	
Finishing coats according to clause 1.2.1	≤ 10,3 %	no flame retardant	

Note: A European reference fire scenario has not been laid down for facades. In some Member States, the classification of ETICS according to EN 13501-1:2020 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.

### 3.2 Water absorption (capillarity test) Base coat and Rendering System

(base coat) and finishing coats indicated in clause 1.2.1	Average water absorption [kg/m <sup>2</sup> ]	
	after 1h	after 24h
[SE 410], 6 mm	0,061	0,312
[SE 772], 4 mm	0,065	0,439
[SE 773], 4 mm	0,050	0,308
[SE 714], 5 mm	0,066	0,441
[SE 715], 7 mm	0,063	0,468
[SE 716], 4 mm	0,059	0,302
[SE 717], 2 mm	0,068	0,370
[SE 750], 10 mm	0,061	0,319
[SE 310], 6 mm	0,066	0,434
[SE 799], 4 mm	0,056	0,318
[SE 510], 6 mm	0,063	0,475
[SE 520], 0,7 mm	0,057	0,311
[SE 530], 0,4 mm	0,068	0,370
[SE 210], 6 mm	0,058	0,371

### 3.3 Watertightness

#### 3.3.1 Moisture content and gradient

moisture content (% by mass): < 20 (< 15)

moisture gradient (% by mass): < 3

measure point	measure height (cm)	moisture content (%)	moisture gradient (%)
F1	120	11 to 14	< 3
F2	60	11 to 14	< 3
F3	120	11 to 13	< 3
F4	60	11 to 13	< 3
F5	140	11 to 12	< 3
F6	70	11 to 12	< 3
F7	120	11 to 14	< 3
F8	60	12 to 14	< 3
F9	150	13 to 14	< 3
F10	50	12 to 14	< 3

#### 3.3.2 Hygrothermal behaviour

The hygrothermal performance has been passed without defects.

#### 3.3.3 Freeze/Thaw-Resistance

No performance assessed, because water absorption after 24 hours < 0,5 kg/m<sup>2</sup>

### 3.4 Impact resistance

[IA 680], [IA 675] (base coat) and finishing coats indicated in cl. 1.2.1	[IG 342], [IG 345] single standard layer		
	Maximum impact diameter:	Presence of cracks:	Impact category
[SE 714]	3 J: 0 mm 10 J: 32 mm	no (3 J) yes (10 J)	Category II
[SE 715]	3 J: 0 mm 10 J: 40 mm	no (3 J) yes (10 J)	Category II
[SE 716]	3 J: 0 mm 10 J: 30 mm	no (3 J) yes (10 J)	Category II
[SE 717]	3 J: 0 mm 10 J: 35 mm	no (3 J) yes (10 J)	Category II





[IA710] [IA 670](base coat) and finishing coats indicated in cl. 1.2.1	[IG 342], [IG 345] double standard layer		
	Maximum impact diameter:	Presence of cracks:	Impact category
[SE 210]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[SE 310]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[SE 410]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[SE 510]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[SE 520]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[SE 530]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[IA720] [IA 670](base coat) and finishing coats indicated in cl. 1.2.1	[IG 342], [IG 345] single standard layer		
	Maximum impact diameter:	Presence of cracks:	Impact category
[SE 714]	3 J: 0 mm 10 J: 32 mm	no (3 J) yes (10 J)	Category II
[SE 715]	3 J: 0 mm 10 J: 40 mm	no (3 J) yes (10 J)	Category II
[SE 716]	3 J: 0 mm 10 J: 30 mm	no (3 J) yes (10 J)	Category II
[SE 717]	3 J: 0 mm 10 J: 35 mm	no (3 J) yes (10 J)	Category II
[SE 750]	3 J: 0 mm 10 J: 45 mm	no (3 J) yes (10 J)	Category II
[SE 772]	3 J: 0 mm 10 J: 39 mm	no (3 J) yes (10 J)	Category II
[SE 773]	3 J: 0 mm 10 J: 40 mm	no (3 J) yes (10 J)	Category II
[SE 799]	3 J: 0 mm 10 J: 39 mm	no (3 J) yes (10 J)	Category II
[SE 210]	3 J: 0 mm 10 J: 40 mm	no (3 J) yes (10 J)	Category II
[SE 310]	3 J: 0 mm 10 J: 34 mm	no (3 J) yes (10 J)	Category II
[SE 410]	3 J: 0 mm 10 J: 39 mm	no (3 J) yes (10 J)	Category II
[SE 510]	3 J: 0 mm 10 J: 30 mm	no (3 J) yes (10 J)	Category II
[SE 520]	3 J: 0 mm 10 J: 32 mm	no (3 J) yes (10 J)	Category II
[SE 530]	3 J: 0 mm 10 J: 32 mm	no (3 J) yes (10 J)	Category II

[IA720], [IA 670] (base coat) and finishing coats indicated in cl. 1.2.1	[IG 342], [IG 345] double standard layer		
	Maximum impact diameter:	Presence of cracks:	Impact category
[SE 714]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[SE 715]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[SE 716]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[SE 717]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[SE 750]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[SE 772]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[SE 773]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[SE 799]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[SE 210]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[IA720], [IA 670] (base coat) and finishing coats indicated in cl. 1.2.1	[IG 342], [IG 345] double standard layer		
	Maximum impact diameter:	Presence of cracks:	Impact category
[SE 310]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[SE 410]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[SE 510]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[SE 520]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I
[SE 530]	3 J: 0 mm 10 J: 0 mm	no (3 J) no (10 J)	Category I

### 3.5 Water vapour permeability

Equivalent air thickness of the			system	
base coat	finishing coat			
[IA 680], [IA 675]	4 mm	[SE 714], 4 mm	0,007 m	0,20 m
		[SE 715], 4 mm	0,006 m	0,20 m
		[SE 716], 4 mm	0,007 m	0,20 m
		[SE 717], 4 mm	0,006 m	0,20 m
		[SE 750], 10 mm	0,006 m	0,20 m
		[SE 772], 4 mm	0,006 m	0,10 m
		[SE 773], 4 mm	0,006 m	0,10 m
		[SE 210], 6 mm	0,006 m	0,30 m
		[SE 310], 4 mm	0,007 m	0,30 m
		[SE 410], 3 mm	0,006 m	0,40 m
		[SE 510], 6 mm	0,006 m	0,30 m
		[SE 520], 6 mm	0,008 m	0,10 m
		[SE 530], 6 mm	0,006 m	0,10 m
		[SE 799], 4 mm	0,006 m	0,10 m
[IA710], [IA 670]	4 mm	[SE 714], 4 mm	0,007 m	0,20 m
		[SE 715], 4 mm	0,006 m	0,20 m
		[SE 716], 4 mm	0,007 m	0,20 m
		[SE 717], 4 mm	0,006 m	0,20 m
		[SE 750], 10 mm	0,006 m	0,20 m
		[SE 772], 4 mm	0,006 m	0,10 m
		[SE 773], 4 mm	0,006 m	0,10 m
		[SE 210], 6 mm	0,006 m	0,30 m
		[SE 310], 4 mm	0,007 m	0,30 m
		[SE 410], 3 mm	0,006 m	0,40 m
		[SE 510], 6 mm	0,006 m	0,30 m
		[SE 520], 6 mm	0,008 m	0,10 m
		[SE 530], 6 mm	0,006 m	0,10 m
		[SE 799], 4 mm	0,006 m	0,10 m

Equivalent air thickness of the			system	
base coat		finishing coat		
[IA720], [IA 670]	4 mm	[SE 714], 4 mm	0,007 m	0,20 m
		[SE 715], 4 mm	0,006 m	0,20 m
		[SE 716], 4 mm	0,007 m	0,20 m
		[SE 717], 4 mm	0,006 m	0,20 m
		[SE 750], 10 mm	0,006 m	0,20 m
		[SE 772], 4 mm	0,006 m	0,10 m
		[SE 773], 4 mm	0,006 m	0,10 m
		[SE 210], 6 mm	0,006 m	0,30 m
		[SE 310], 4 mm	0,007 m	0,30 m
		[SE 410], 3 mm	0,006 m	0,40 m
		[SE 510], 6 mm	0,006 m	0,30 m
		[SE 520], 6 mm	0,008 m	0,10 m
		[SE 530], 6 mm	0,006 m	0,10 m
		[SE 799], 4 mm	0,006 m	0,10 m

### 3.6 Bond strength between base coat and insulation product

Substrate: WF insulation		Conditioning	
		Initial state [MPa]	After hygrothermal cycles [MPa]
[IA 680], [IA 675]	Average	0,014 / 100% Type 1	0,022 / 100% Type 1
	Minimum value	0,010	0,016
[IA710], [IA 670]	Average	0,012 / 100% Type 1	0,022 / 100% Type 1
	Minimum value	0,010	0,015
[IA720], [IA 670]	Average	0,011 / 100% Type 1	0,022 / 100% Type 1
	Minimum value	0,010	0,015

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

No performance assessed (NPA), because system is mechanically fixed.

### 3.8 Fixing strength (displacement test)

$U_e$  (displacement corresponding to the elasticity limit) = 2,5 mm

### 3.9 Wind load resistance

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

<b>Anchors for which the following failure loads apply</b>	Trade name	<b>Anchors</b>
	Plate diameter (mm)	≥ 60
<b>Characteristics of the insulation product panels for which the following failure loads apply</b>	Thickness (mm)	≥ 60
	Tensile strength perpendicular to the face (kPa)	≥ 7,5

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

$$R_d = \frac{Q_1 \times C_s \times C_a}{m}$$

$$R_d \geq S_d$$

Where:

- $R_d$  design resistance
- $S_d$  wind load suction
- $Q_1$  test result
- $C_s$  statical correction factor
- $C_a$  geometric factor
- $m$  national safety factor of resistance for normal materials (partial safety factor to be chosen in function of type of failure which occurred and the ageing of material properties concerned).

The above given loads apply for all anchors if they meet the following criteria:

- plate diameter of anchor ≥ 60 mm
- plate stiffness of anchor ≥ 0,5 kN/mm
- load resistance of anchor plate ≥ 1,0 kN

#### 3.9.1.2 Wind load resistance of mechanically fixed ETICS

<b>Apply to all anchors listed in the clause 3.9.1.1 mounted on the insulation panels surface</b>			
Characteristics of “110er-Platte”	Thickness		≥ 60 mm
	<b>Tensile strength perpendicular to the faces</b>		≥ 10 kPa
Plate diameter of anchor			Ø 60 mm
Failure loads [N]	Anchors placed not at the panel joint of the insulation (Static Foam Block test in conjunction with Displacement Test)	$R_{panel,DT}$	Minimal: 368 Average: 397
	Anchors placed not at the panel joint of the insulation product (Pull-through test)	$R_{panel,PT}$	Minimal: 554 Average: 564
<i>Anchors not placed at the panel joints.</i>			

<b>Apply to all anchors listed in the clause 3.9.1.1 mounted on the insulation panels surface</b>			
Characteristics of “140er-Platte”	Thickness		≥ 60 mm
	<b>Tensile strength perpendicular to the faces</b>		≥ 20 kPa
Characteristics of “180er-Platte”	Thickness		≥ 40 mm
	<b>Tensile strength perpendicular to the faces</b>		≥ 30 kPa
Plate diameter of anchor			Ø 60 mm
Failure loads [N]	Anchors placed not at the panel joints of the insulation (Static Foam Block Test in conjunction with Displacement Test)	$R_{panel,DT}$	Minimal: 566 Average: 607
	Anchors placed not at the panel joints of the insulation (Pull-through test)	$R_{panel,PT}$	Minimal: 762 Average: 813
	Anchors placed at the panel joints (Pull-through test)	$R_{joint,PT}$	Minimal: 567 Average: 573

### 3.9.2 Safety in use of mechanically fixed ETICS using staples

#### 3.9.2.1 Dynamic wind uplift test

Anchors for which the following failure loads apply	Trade name	Staples
	Characteristics of the insulation product panels for which the following failure loads apply	Staples width (mm)
	Thickness (mm)	≥ 40
	Tensile strength perpendicular to the face (kPa)	≥ 15

For all calculations the following formula shall be used:

$$R_d = \frac{2}{m}$$

$$R_d \geq S_d$$

where:

$R_d$ : design resistance

$S_d$ : wind load suction

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

The following values only apply for the combination (Staples) / (insulation product characteristics) mentioned in the first lines of each table.

- dimension of Staples e.g. in accordance to national documents
- Pull-out strength of mechanical fixings in support to EN 1382 ≥ 70 N

#### 3.9.2.2 Wind load resistance of mechanically fixed ETICS

Apply to all Staples listed in the clause 3.9.2.1			
Characteristics of "140er-Platte"	Thickness		≥ 60 mm
	Tensile strength perpendicular to the faces		≥ 20 kPa
Characteristics of "180er-Platte"	Thickness		≥ 40 mm
	Tensile strength perpendicular to the faces		≥ 30 kPa
Staples width			26 mm
Failure loads [N]	Staples placed not at the panel joint of the insulation with a clip distance of 120 mm (Pull-through test)	$R_{\text{panel},120}$	Minimal: 313 Average: 333
	Staples placed not at the panel joint of the insulation with a clip distance of 70 mm (Pull-through test)	$R_{\text{panel},70}$	Minimal: 209 Average: 224
	Staples placed at the panel joints with a clip distance of 120 mm (Pull-through test)	$R_{\text{joint},120}$	Minimal: 198 Average: 216

### 3.10 Protection against corrosion

Corrosion protection of metal fasteners and Staples corresponds to the requirements of the intended service class (see EN 1995-1-1 and the corresponding reference standards). For especially corrosive conditions consideration should be given to heavier hot dip coatings or stainless steel.

### 3.11 Thermal resistance

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

$$U = U_c + \chi_{p,n}$$

$\chi_{p,n}$  has only to be taken into account if it is greater than 0,04 W/(m<sup>2</sup>·K)

Where: U: global thermal transmittance of the covered wall (W/ (m<sup>2</sup>·K))  
 n: number of anchors (through insulation product) per m<sup>2</sup>  
 χ<sub>p</sub>: 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 air gap at head of the screw (χ<sub>p</sub>·n negligible for n < 20)  
 = 0,004 W/K for anchors with a galvanized steel screw with the head covered by a plastic material (χ<sub>p</sub>·n negligible for n < 10)  
 = negligible for anchors with plastic nails (reinforced or not with glass fibres ...)  
 U<sub>c</sub>: thermal transmittance of the current part of the covered wall (excluding thermal bridges) (W/ (m<sup>2</sup>·K)) determined as follows:

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

Where: R<sub>i</sub>: thermal resistance of the insulation product (according to declaration in reference to EN 13163) in (m<sup>2</sup>·K)/W  
 R<sub>render</sub>: thermal resistance of the render (about 0.02 in (m<sup>2</sup>·K)/W)  
 R<sub>substrate</sub>: thermal resistance of the substrate of the building in (m<sup>2</sup>·K)/W  
 R<sub>se</sub>: external superficial thermal resistance in (m<sup>2</sup>·K)/W  
 R<sub>si</sub>: 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 Declaration of performance 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.

### 3.12 Render strip tensile test

No performance assessed

### 3.13 Bond strength after ageing

		after hygrothermal cycles (on the rig)
<b>Rendering systems:</b> [IA 680], [IA 675] + finishing coats indicated hereafter:	[SE 714], [SE 715], [SE 716], [SE 717], [SE 750], [SE 772], [SE 773], [SE 799]	0,07 MPa
	[SE 210]	0,06 MPa
	[SE 310]	0,05 MPa
	[SE 410]	0,05 MPa
	[SE 510]	0,06 MPa
	[SE 520]	0,06 MPa
	[SE 530]	0,05 MPa
<b>Rendering systems:</b> [IA 710], [IA 670] + finishing coats indicated hereafter:	[SE 714], [SE 715], [SE 716], [SE 717], [SE 750], [SE 772], [SE 773], [SE 799]	0,07 MPa
	[SE 210]	0,06 MPa
	[SE 310]	0,05 MPa
	[SE 410]	0,05 MPa
	[SE 510]	0,06 MPa
	[SE 520]	0,06 MPa
	[SE 530]	0,05 MPa
<b>Rendering systems:</b> [IA 720], [IA 670] + finishing coats indicated hereafter:	[SE 714], [SE 715], [SE 716], [SE 717], [SE 750], [SE 772], [SE 773], [SE 799]	0,07 MPa
	[SE 210]	0,06 MPa
	[SE 310]	0,05 MPa
	[SE 410]	0,05 MPa
	[SE 510]	0,06 MPa
	[SE 520]	0,06 MPa
	[SE 530]	0,05 MPa

### 3.14 Protection against noise

#### 3.14.1 Airborne sound insulation of ETICS

No performance assessed.

#### 3.14.2 Dynamic stiffness of insulation product

No performance assessed.

## 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 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.

Product(s)	Intended use(s)	Level(s) or class(es) (Reaction to fire)	System(s)
External thermal insulation composite systems/kits (ETICS) with rendering	in external wall subject to fire regulations	A1 <sup>(1)</sup> , A2 <sup>(1)</sup> , B <sup>(1)</sup> , C <sup>(1)</sup>	1
		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)

<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)

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

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at the Österreichisches Institut für Bautechnik.

Issued in Vienna, on 15.11.2025  
by Österreichisches Institut für Bautechnik

The original document is signed by:

Thomas Rockenschaub  
Deputy Managing Director

**ANNEX 1**  
Reference list of further trade names

Product	Fixit-Group	FIXIT	GREUTOL	HASIT	RÖFIX	KREISEL
Adhesive	[IA 650] alt [IA 660] neu	FIXIT IA 650	GREUTOL IA 650	HASIT IA 650	RÖFIX W50 Klebespachtel RÖFIX W50 CAM	KREISEL IA 650
	IA 710] alt [IA 670] neu	FIXIT 435	GREUTOL IA 710	HASIT Dieplast 804 grau	RÖFIX POLYSTAR (grau) RÖFIX RasoBasic RÖFIX RasoBasic CAM	KREISEL IA 710
	[IA 720] alt [IA 670] neu	FIXIT IA 720	GREUTOL IA 720	HASIT Dieplast 804 weiß	RÖFIX POLYSTAR (weiß) RÖFIX Polystar CAM RÖFIX RasoBasic RÖFIX RasoBasic CAM	KREISEL IA 720
	[IA 675]	FIXIT 433 Combiputz leicht	GREUTOL Combi-Putz 488		RÖFIX Poly Light RÖFIX Poly Light CAM RÖFIX Polystar Light mineralisch RÖFIX Poly Light mineralisch	-
	[IA 680]	FIXIT 439	GREUTOL Combi light 432, GREUTOL Combi-Putz 488	HASIT Dieplast 860 light	RÖFIX Unistar Light RÖFIX Unistar Light CAM RÖFIX Unistar Light mineralisch RÖFIX Unistar MINERAL RÖFIX Unistar Light XL	KREISEL IA 680
	[IA 690]	FIXIT 469 Sockelmörtel Combi 1K	RÖFIX Collstar	HASIT Dieplast 874	RÖFIX Collstar	KREISEL IA 690
Base Coat	[IA 710]	FIXIT 435	GREUTOL IA 710	HASIT Dieplast 804 grau	RÖFIX POLYSTAR (grau) RÖFIX RasoBasic RÖFIX RasoBasic CAM	KREISEL IA 710
	[IA 720]	FIXIT IA 720	GREUTOL IA 720	HASIT Dieplast 804 weiß	RÖFIX POLYSTAR (weiß) RÖFIX Polystar CAM RÖFIX RasoBasic RÖFIX RasoBasic CAM	KREISEL IA 720
	[IA 675]	FIXIT 433 Combiputz leicht	GREUTOL Combi-Putz 488		RÖFIX Poly Light RÖFIX Poly Light CAM RÖFIX Polystar Light mineralisch RÖFIX Poly Light mineralisch	-
	[IA 680]	FIXIT 439 Klebe- und Ein- bettmörtel Uni leicht	GREUTOL Combi light 432	HASIT Dieplast 860 Light HASIT Dieplast 868 All- star Light	RÖFIX Unistar Light RÖFIX Unistar Light CAM RÖFIX Unistar Light mineralisch RÖFIX Unistar MINERAL RÖFIX Unistar Light XL	KREISEL IA 680
Glass fibre mesh	[IG 342]	-	-	HASIT Armie- rungsgewebe rot	RÖFIX P50 Armerungsgewebe	KREISEL Armierungsgewebe
	[IG 345]	FIXIT Armierungsgewebe 7x7	GREUTOL Armierungsgewebe 7x7	HASIT Armierungsge- webe weiß	RÖFIX P100 Armierungsgewebe	
Key Coat	[SP 300]	FIXIT 475 Grudierung für min. Deckputze	GREUTOL Voranstrich mineral	HASIT Putzgrund UNI	RÖFIX Putzgrund UNI	KREISEL SP 300
	[SP 310]	FIXIT 471 Putzgrund Premium	GREUTOL Voranstrich UNI	HASIT Putzgrund PREMIUM	RÖFIX Putzgrund Premium	KREISEL SP 310

Product	Fixit-Group	FIXIT	GREUTOL	HASIT	RÖFIX	KREISEL
Finishing Coat (Powder)	[SE 714]	FIXIT 777 Edelputz	GREUTOL Edelputz 400 Vollabrieb / Rillenstruktur	HASIT 715 OPTI Scheibenputz HASIT 705 Kornstrukturputz HASIT 250 Renoplus HASIT 252 Renodesign	RÖFIX SE 714	KREISEL SE 714
	[SE 715]	FIXIT 777 Edelputz	GREUTOL Edelputz 400 Vollabrieb / Rillenstruktur	HASIT 704 OPTI Kratzputzstruktur HASIT 706 OPTI Edelkratzputzstruktur	RÖFIX 715 Edelputz Spezial RÖFIX 776 Schlämm- und Waschputz	KREISEL SE 715
	[SE 716]	FIXIT SE 716	GREUTOL SE 716	HASIT 710 LITHIN Rillenputzstruktur	RÖFIX SE 716	KREISEL SE 716
	[SE 750]	FIXIT 764 Kellenwurf	GREUTOL Kellenwurf 300	HASIT 700 LITHIN Kellenwurf	RÖFIX 750 Kellenwurf	KREISEL SE 750
	[SE 772]	FIXIT SE 772	GREUTOL SE 772	HASIT SE 772	RÖFIX 772 Kratzputz	KREISEL SE 772
	[SE 773]	FIXIT 793 Steinputz	GREUTOL Steinputz 793	HASIT 725 Kratzputz opti 1	RÖFIX 773 Stoneline	KREISEL SE 773
	[SE 799]	FIXIT 745 Designputz	GREUTOL Multimörtel 406 / GREUTOL Multispachtel 407	HASIT SE 799	RÖFIX Designputz	KREISEL SE 799
Finishing Coat (Paste)	[SE 210]	Silikatputz aussen	Silikatputz aussen	HASIT SE 210 Mineral	RÖFIX Silikatputz RÖFIX GREEN	KREISEL Silikatputz
	[SE 310]	FIXIT 710 Universal Kunstharzputz	GREUTOL Deckputz aussen Vollabrieb Univrsal	HASIT SE 310 ELAST	RÖFIX Kunstharzputz	KREISEL Kunstharzputz
	[SE 410]	FIXIT 740 Si Silikonharzputz	GREUTOL Silikondeckputz 365/366	HASIT SE 410 PROTECT	RÖFIX Silikonharzputz Protect, RÖFIX Silikonharzputz Premium, RÖFIX FIBRA, RÖFIX DARK, RÖFIX SIL	KREISEL Silikonharzputz Protect
	[SE 510]	FIXIT 740 Si Silikonharzputz	GREUTOL Silikonharz Deckputz 361 / 360	HASIT SE 510 SISI VITAL	RÖFIX SiSi- Putz Vital, RÖFIX SiSi- Putz Kreativ, SiSi-Futura	KREISEL SiSi-Putz Vital
	[SE 520]	FIXIT Anticofino	-	HASIT SE 520	RÖFIX Anticofino	FIXIT Anticofino
	[SE 530]	FIXIT Decofino	-	HASIT SE 530	RÖFIX Decofino	KREISEL Decofino
Finishing Paint	[PE 229]	Fixit 784 OF	GREUTOL GreoColor OptiSilc OF	HASIT PE 228 SILICATE SOL	RÖFIX PE 229 SOL SILIKAT	KREISEL PE 229
	[PE 319]	Fixit 782	GREUTOL Greo Color OptiTop	HASIT PE 319 OUT SIDE	RÖFIX PE 319 OUT SIDE	KREISEL PE 319
	[PE 410]	Fixit 785 evo	GREUTOL Greo Color Dispersion Aussen	HASIT PE 410 EGALISATION	RÖFIX PE 410 EGALISATION	KREISEL PE 410
	[PE 419]	FIXIT PE 419		HASIT PE 419	RÖFIX PE 419 ETICS	KREISEL PE 419
	[PE 429]	FIXIT PE 429	GREUTOL Greo Color OptiSilc	HASIT PE 429 SILOSAN	RÖFIX PE 429 SILOSAN	KREISEL PE 429
	[PE 516]	Fixit 786	-	HASIT PE 516 SISI MICRO	RÖFIX PE 516 SISI MICRO	KREISEL PE 516
	[PE 519]	Fixit 786 Si Silikat-Slikon-Überrolfarbe	GREUTOL OptiTop	HASIT PE 519 SISI OUT DOOR, HASIT PE 519 SISI IMPRESSIVE	RÖFIX PE 519 PREMIUM SISI, RÖFIX PE 519 PREMIUM DARK	KREISEL PE 519

Note: Finishing paints optional for [SE 714], [SE 715], [SE 716], [SE 717], [SE 750], and [SE 799].