

EUROPEAN TECHNICAL ASSESSMENT

ETA 13/0285
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UBA^tc Assessment Operator:
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Technical Assessment Body issuing the European Technical Assessment: UBA^tc.

UBA^tc has been designated according to Article 29 of Regulation (EU) No 305/2011
and is member of EOTA (European Organisation for Technical Assessment)

Trade name of the construction product:

IKO TANETECH BT

Product family to which the construction product belongs:

Liquid Applied Roof Waterproofing Kits

Manufacturer:

IKO N.V.

Manufacturing plant:

D'Herbouvillekaai 80
2020 Antwerpen
Belgium

Website:

www.ikoflexia.com

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

European Assessment Document (EAD):
EAD 030350-00-0402

This version replaces:

ETA 13/0285, issued on 27 January 2020

This European Technical Assessment contains:

8 pages, including 1 annex, which forms an integral part of the document.



**European Organisation
for Technical Assessment**

Legal bases and general conditions

- 1 This European Technical Assessment is issued by UBAtc (Union belge pour l'Agrément technique de la construction, i.e. Belgian Union for technical Approval in construction), in accordance with:
 - Regulation (EU) No 305/2011¹ of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC, as amended
 - Commission Implementing Regulation (EU) No 1062/2013² of 30 October 2013 on the format of the European Technical Assessment for construction products
 - European Assessment Document (EAD): 030350-00-0402
 - 2 Under the provisions of Regulation (EU) No 305/2011, UBAtc is not authorized to check whether the provisions of this European Technical Assessment are met once the ETA has been issued.
 - 3 The responsibility for the conformity of the performances of the products with this European Technical Assessment and the suitability of the products for the intended use remains with the holder of the European Technical Assessment.
 - 4 Depending on the applicable Assessment and verification of constancy of performance (AVCP) system, (a) notified body(ies) may carry out third-party tasks in the process of assessment and verification of constancy of performance under this Regulation once the European Technical Assessment has been issued.
 - 5 This European Technical Assessment allows the manufacturer of the construction product covered by this ETA to draw up a declaration of performance for the construction product.
 - 6 CE marking should be affixed to all construction products for which the manufacturer has drawn up a declaration of performance.
 - 7 This European Technical Assessment is not to be transferred to other manufacturers, agents of manufacturers, or manufacturing plants other than those indicated on page 1 of this European Technical Assessment.
 - 8 The European Technical Assessment holder confirms to guarantee that the product(-s) to which this assessment relates, is/are produced and marketed in accordance with and comply with all applicable legal and regulatory provisions, including, without limitation, national and European legislation on the safety of products and services. The ETA-holder shall notify the UBAtc immediately in writing of any circumstance affecting the aforementioned guarantee. This assessment is issued under the condition that the aforementioned guarantee by the ETA-holder will be continuously observed.
 - 9 According to Article 11(6) of Regulation (EU) No 305/2011, when making a construction product available on the market, the manufacturer shall ensure that the product is accompanied by instructions and safety information in a language determined by the Member State concerned which can be easily understood by users. These instructions and safety information should fully correspond with the technical information about the product and its intended use, which the manufacturer has submitted to the responsible Technical Assessment Body for the issuing of the European Technical Assessment.
 - 10 Pursuant to Article 11(3) of Regulation (EU) No 305/2011, manufacturers shall adequately take into account changes in the product-type and in the applicable harmonised technical specifications. Therefore, when the contents of the issued European Technical Assessment do not any longer correspond to the product-type, the manufacturer should refrain from using this European Technical Assessment as the basis for their declaration of performance.
 - 11 All rights of exploitation in any form and by any means of this European Technical Assessment is reserved for UBAtc and the ETA-holder, subject to the provisions of the applicable UBAtc regulations.
 - 12 Reproduction of this European Technical Assessment including transmission by electronic means shall be in full. However, partial reproduction can be made with the written consent of UBAtc. In this case partial reproduction has to be designated as such. Texts and drawings of advertising brochures shall not contradict or misuse the European Technical Assessment.
 - 13 Subject to the application introduced, this European Technical Assessment is issued in English and may be issued by the UBAtc in its official languages. The translations correspond fully to the English reference version circulated in EOTA.
 - 14 This European Technical Assessment was first issued by UBAtc on 4 March 2022, replacing the European Technical Assessment 13/0285 (version 02) dated 27 January 2020, which replaced European Technical Assessment 13/0285 (version 01) dated 7 January 2019.
- Compared to the previous version, this European Technical Assessment, issued on 4 March 2022, comprises no technical changes (only new product names).

¹ OJEU, L 88 of 2011/04/04

² OJEU, L 289 of 2013/10/31

Technical Provisions

1 Technical description of the product

1.1 General

This ETA is being issued for the products specified on the cover page on the basis of agreed data/information, deposited with the UBAtc, which identifies the products that have been assessed. Changes to the product/production process, which could result in the deposited data/information being incorrect, should be notified to the UBAtc before the changes are introduced. The UBAtc will decide whether such changes affect the ETA and if so whether further assessment/alterations to the ETA, shall be necessary.

1.2 Characteristics and components of the Liquid Applied Roof Waterproofing Kits

The Liquid Applied Roof Waterproofing system IKO TANETECH BT is a kit.

The kit consists of a first layer of IKO TANETECH BT on which IKO GLASS FLEECE 225 reinforcement is embedded, and a second layer of IKO TANETECH BT.

Specific substrates require a IKO TANETECH CONCRETE PRIMER or IKO TANETECH BITUMEN PRIMER to promote adhesion of the waterproofing layer.

As assembled, these components form a homogeneous waterproofing system.

The waterproofing layer shall be covered by different finishing layers as described in 1.2.4.

Table 1 – IKO TANETECH BT – thickness of layers

Layer of the system (from bottom to top)	Product	Thickness (mm)	Coverage
Primer			
Primer	IKO TANETECH CONCRETE PRIMER or IKO TANETECH BITUMEN PRIMER	-	0,10 – 0,20 l/m ²
Waterproofing layer			
1 st layer	IKO TANETECH BT		1,10 l/m ²
Reinforcement	IKO GLASS FLEECE 225	1,6	-
2 nd layer	IKO TANETECH BT		0,65 l/m ²
Finishing layer (option 1): Tiles			
Mortar	TEKNOFIX	≤ 10	0,9 – 2,1 kg/m ² ⁽¹⁾
Tile	-	≥ 40	-
Finishing layer (option 2): Mortar of quartz			
Coating	IKO TANETECH QUARTZ BINDER	-	0,1 l/m ²
Mortar of quartz	IKO TANETECH QUARTZ BINDER+ IKO QUARTZSAND 0,6-1,2	3,0	~5,0 kg/m ²
Coating (optional)	IKO TANETECH FINISH	-	≥ 0,4 l/m ²
Finishing layer (option 3): Flakes			
Coating	IKO TANETECH BT	-	0,3 l/m ²
Flakes	IKO DECO CHIPS	0,2	0,05 – 0,30 kg/m ²
Coating (required)	IKO TANETECH FINISH	-	≥ 0,4 l/m ²
Finishing layer (option 4): Anti-slip layer			
Coating	IKO TANETECH BT	-	0,3 – 0,4 l/m ²
Quartz	IKO QUARTZSAND 0,3 – 0,6	0,6	1,0 – 3,0 kg/m ² ⁽²⁾
Coating (optional)	IKO TANETECH FINISH	-	≥ 0,4 l/m ²

(1) According to the thickness of the layer
(2) Partial or full surface spreading

1.2.1 IKO TANETECH BT waterproofing layer

IKO TANETECH BT is a one-component moisture curing polyurethane (PU) that forms an elastic film after polymerisation.

1.2.2 IKO GLASS FLEECE 225 reinforcement

IKO GLASS FLEECE 225 reinforcement is a glass fleece, with a mass per unit area of approx. 225 g/m².

1.2.3 Primers

1.2.3.1 IKO TANETECH CONCRETE PRIMER

The IKO TANETECH CONCRETE PRIMER is a two-component aqueous phase epoxy resin.

The IKO TANETECH CONCRETE PRIMER Part A is an aqueous phase epoxy resin. The IKO TANETECH CONCRETE PRIMER Part B is an aqueous phase polyamine.

The IKO TANETECH CONCRETE PRIMER shall be used in case of substrates made of concrete, cement-based substrates or tiles.

2,3 parts (mass) of IKO TANETECH CONCRETE PRIMER Part B shall be added to 1 part (mass) of the IKO TANETECH CONCRETE PRIMER Part A.

1.2.3.2 IKO TANETECH BITUMEN PRIMER

The IKO TANETECH BITUMEN PRIMER is one-component based upon solvents.

It shall be used in case of metallic substrates, bituminous existing waterproofing sheets or hard synthetic substrates.

1.2.4 Finishing layer - components

1.2.4.1 TEKNOFIX lightweight mortar

The TEKNOFIX is a lightweight flexible, C2 mortar adhesive according to EN 12004-1.

The TEKNOFIX is used to bond the tiles on the IKO TANETECH BT waterproofing layer.

1 kg of TEKNOFIX shall be mixed with 0,6 l of water.

1.2.4.2 IKO TANETECH QUARTZ BINDER coating

The IKO TANETECH QUARTZ BINDER coating is a one-component aliphatic polyurethane resin.

A first layer of IKO TANETECH QUARTZ BINDER coating shall be applied on the IKO TANETECH BT waterproofing layer. Then a mortar of quartz shall be applied. The mortar of quartz consists of 6 parts of IKO QUARTZSAND 0,6 – 1,2 mixed with 1 part of IKO TANETECH QUARTZ BINDER. An optional layer of IKO TANETECH FINISH may be applied over the mortar of quartz.

1.2.4.3 IKO TANETECH FINISH coating

The IKO TANETECH FINISH coating is a one-component aliphatic polyurethane resin.

1.2.4.4 IKO QUARTZSAND 0,6 – 1,2 quartz

The IKO QUARTZSAND 0,6 – 1,2 exists in different colours: Mixed Grey, Red Brick, Yellow Beach, Green Wimbledon, Red Terra Cotta, Graffito Elite...

1.2.4.5 IKO QUARTZSAND 0,3 – 0,6 quartz

The IKO QUARTZSAND 0,3 – 0,6 quartz exists in 2 standard colours: Grey, Beige.

The IKO QUARTZSAND 0,3 – 0,6 quartz shall be broadcast in an additional layer of IKO TANETECH BT. An optional layer of IKO TANETECH FINISH may be applied over the IKO QUARTZSAND 0,3 – 0,6 – IKO TANETECH BT layer.

1.2.4.6 IKO DECO CHIPS flakes

The IKO DECO CHIPS flakes are made of acrylate resin.

A layer of IKO TANETECH FINISH shall be applied over the IKO DECO CHIPS flakes.

2 Specification of the intended use(s) in accordance with the applicable EAD

The Liquid Applied Roof Waterproofing Kit IKO TANETECH BT is used for the waterproofing of terraces and balconies against penetration of water into the internal structure of the building.

The following substrate is suitable for the Liquid Applied Roof Waterproofing Kit: concrete, cement-based substrates or tiles, metallic substrates, bituminous existing waterproofing sheets or hard synthetic substrates.

The provisions made in this ETA are based on an assumed working life of the waterproofing system of 25 years (W3).

The indications given on the working life cannot be interpreted as a guarantee given by the manufacturer, but are to be used as a means for selecting the appropriate products in relation to the expected economically reasonable working life of the works.

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

3.1 ER2: Safety in case of fire

3.1.1 External fire performance of roofs

The Liquid Applied Roof Waterproofing Kit finished with TEKNOFIX mortar and tiles (as described in Table 1 – option 1) has an external fire performance classification class B_{ROOF} (t1) according to EN 13501-5.

For all other applications, the external fire performance classification is class F_{ROOF} (t1, t2, t3, t4) (no assessment performed).

3.1.2 Reaction to fire

No performance has been assessed for the Liquid Applied Roof Waterproofing Kit regarding reaction to fire classification according to EN 13501-1.

3.1.3 Working life, durability

During the intended use, Liquid Applied Roof Waterproofing Kit remains undamaged and the properties are not subject to unacceptable changes due to external agencies in such a way as to affect the reaction to fire and the external fire performance of the assembled system

3.2 ER3: Hygiene, Health and the Environment

3.2.1 Release of dangerous substances

The manufacturer provided a declaration of conformity to the Council Directive 76/769/EEC published in "Official Journal of the European Communities" of 27/07/1976 and its amendments.

3.2.2 Working life, durability

The product has been successfully subjected to the following tests, which are relevant for Liquid Applied Roof Waterproofing Kits: EAD 030350-00-0402, clauses 2.2.4, 2.2.5, 2.2.6, 2.2.7.1, 2.2.8, 2.2.9.1, 2.2.9.3, 2.2.10.1, 2.2.10.2 and 2.2.10.3.

3.3 ER4: Safety in use

3.3.1 Slipperiness

No performance has been assessed for the Liquid Applied Roof Waterproofing Kit regarding the slipperiness according to EN 13894.

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

In accordance with Regulation (EU) N° 305/2011, Article 65, Directive 89/106/EEC is repealed, but references to the repealed Directive shall be construed as references to the Regulation.

The systems of assessment and verification of constancy of performance, specified in the Decision of the Commission 98/599/EC³ of the European Commission, as amended by Commission Decision 2001/596/EC⁴, and Commission Delegated Regulation (EU) 2016/364⁵, are specified in the following table.

Table 2 – System(s) of assessment and verification of constancy of performance (AVCP)

Product(s)	Intended use(s)	Level(s) or class(es)	AVCP system(s) ^a
	Roof coverings subject to reaction to fire regulations	(A1, A2, B, C) ^b	1
		(A1, A2, B, C) ^c , D, E, F	3
		(A1, A2, B, C, D, E, F) ^d , NPD ^e	4
Liquid Applied Roof Waterproofing Kit	Roof coverings subject to external fire performance regulations	Products requiring testing	3
		Products deemed to satisfy without testing, to be confirmed in discussions with the Fire Regulators Group	4
	All uses not referred to above	-	3

- ^a See Annex V to Regulation (EU) N° 305/2011
- ^b 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)
- ^c Products/materials not covered by footnote (*)
- ^d Products/materials that do not require to be tested for reaction to fire (e.g. Products/materials of class A1 according to Commission Decision 96/603/EC, as amended)
- ^e 'No Performance Declared' in accordance with Regulation (EU) N° 305/2011, Article 6(f)

Because the Liquid Applied Roof Water-proofing Kit can be subject to external fire regulations and the Liquid Applied Roof Waterproofing Kit are not deemed to satisfy without testing, AVCP 3 system applies.

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

5.1 Tasks for the ETA-holder - Factory production control (FPC)

5.1.1 General

The manufacturer shall establish, document and maintain a FPC system to ensure that the products placed on the market conform to the stated performance characteristics. The FPC system shall consist of procedures, regular inspections and tests and/or assessments and the use of the results to control raw and other incoming materials or components, equipment, the production process and the product.

The results of inspections, tests or assessments requiring action shall be recorded, as shall any action taken. The action to be taken when control values or criteria are not met shall be recorded.

5.1.2 Equipment

All weighing, measuring and testing equipment shall be calibrated and regularly inspected according to documented procedures, frequencies and criteria.

5.1.3 Raw materials and components

The specifications of all incoming raw materials and components shall be documented, as shall the inspection scheme for ensuring their conformity.

5.1.4 Non-conforming products

In the event of any non-conformity of any product, that product shall be placed into quarantine and action taken to rectify the cause of the non-conformity. Products may not subsequently be dispatched until the problem has been resolved.

5.1.5 Tests and frequencies

All the elements, requirements and provisions adopted by the manufacturer are documented in a systematic manner in the form of written policies and procedures. This production control system ensures that the product is in conformity with the European Technical Assessment (ETA). The manufacturing and quality control procedures are confidential and deposited with the Assessment Operator.

5.2 Tasks of notified bodies - Assessment of the performance of the product

Assessment tests on the Liquid Applied Roof Waterproofing Kit have been conducted under the responsibility by the assessment body (UBA_{tc}) in accordance with Chapter 3 of the EAD 030350-00-0402. The assessment body (UBA_{tc}) has assessed the results of these tests in accordance with Chapter 2 of this EAD, as part of the ETA issuing procedure. For characteristics under AVCP system 3, Regulation (EU) N° 305/2011, Annex V, clause 1.6 applies.

³ OJEU L 287, 24.10.1998

⁴ OJEU L 209, 2.8.2001

⁵ OJEU L 68/4, 15.03.2016

6 Bibliography

The following documents, in whole or in part, are normatively referenced in this European Technical Assessment and are indispensable for its application.

EAD 030350-00-0402 (August 2018)	European Assessment Document of Liquid Applied Roof Waterproofing Kits
EN ISO 1675	Plastics - Liquid resins - Determination of density by the pycnometer method
EN ISO 2555	Plastics - Resins in the liquid state or as emulsions or dispersions - Determination of apparent viscosity by the Brookfield Test method
EN ISO 3451-1	Plastics - Determination of ash - Part 1: General methods
EN 12004-1	Adhesives for ceramic tiles - Part 1: Requirements, assessment and verification of constancy of performance, classification and marking
EN 13501-1	Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests
EN 13501-5	Fire classification of construction products and building elements - Part 5: Classification using data from external fire exposure to roofs tests
EN 29073-1	Textiles - Test methods for nonwovens - Part 1: Determination of mass per unit area
EN 29073-3	Textiles - Test methods for nonwovens - Part 3: Determination of tensile strength and elongation

Note: This ETA is based on the reference documents specified in EAD 030350-00-0402. In case the publication of (a) new version(s) of these reference documents introduces a change that might influence the content of this ETA, the manufacturer should take the necessary actions to bring this ETA in line with this/these new version(s).

ANNEX 1 – IKO TANETECH BT SYSTEM

The levels of performance presented in Table 3 apply, under the assumption that the waterproofing system build-up is as follows:

1. Primer IKO TANETECH CONCRETE PRIMER or IKO TANETECH BITUMEN PRIMER;
2. 1st layer of IKO TANETECH BT in which IKO GLASS FLEECE 225 reinforcement is embedded;
3. 2nd layer of IKO TANETECH BT;
4. Finishing layer as described in 1.2.4.

The thicknesses of the components of the system are specified in Table 1 of this ETA. The substrates, primers and finishing applicable to this kit are defined in the body of this ETA.

Table 3 – Level Of Performance

Characteristic	Level of Performance
External fire performance (according to EN 13501-5)	B _{ROOF} (t1) ⁽¹⁾ F _{ROOF} (t1) ⁽²⁾
Reaction to fire (according to EN 13501-1)	NPA ⁽³⁾
Expected working life	W3
Climatic zone of use	M
User loads	P4
Resistance to dynamic indentation	I4
Roof slopes	S1 to S4
Surface temperature	
Lowest	TL4
Highest	TH4
Status on dangerous substances	None contained
Slipperiness (dynamic coefficient of friction)	NPA ⁽³⁾
Root resistance	NPA ⁽³⁾
Resistance to wind loads	~ 1.200kPa ⁽⁴⁾
Water vapour diffusion resistance factor μ	~ 7.850
Watertightness	Pass
⁽¹⁾	Finishing with TEKNOFIX mortar and tiles (thickness \geq 40 mm)
⁽²⁾	No test performed for all other finishings than mentioned in comment ⁽¹⁾
⁽³⁾	NPA = No Performance Assessed
⁽⁴⁾	On concrete

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This European Technical Assessment has been issued by UBAtc asbl, in Sint-Stevens-Woluwe, on the basis of the technical work carried out by the Assessment Operator, BCCA.

On behalf of UBAtc asbl,

On behalf of the Assessment Operator, BCCA,
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The most recent version of this European Technical Assessment may be consulted on the UBAtc website (www.ubatc.be).