

INSTALLATION GUIDELINES

IKO TANETECH ROOF

These installation instructions have been produced according to the current technical standards. Any directives, standards, rules or national regulations, which are stricter than these installation instructions, must be respected.

In circumstances that defer from the above, please contact IKO.

DESCRIPTION

IKO tanetech Roof is a single-component liquid waterproofing system based on PU polymers. It is used for waterproofing flat, pitched and industrial roofs, whether they are accessible or non-accessible. IKO tanetech Roof is especially recommended for waterproofing roofs, including technical installations and industrial roofs both for new buildings and renovation work.

ADVANTAGES

IKO tanetech Roof has the following advantages:

- Seamless membrane
- Easy, flame-free application
- Extended drying time – no pot life
- Easy to use for precision work in difficult areas
- Compatible with IKO enertherm and other insulation materials
- Adheres fully to bituminous/synthetic membranes and other roofing materials
- Excellent UV resistance

TECHNICAL SUPPORT

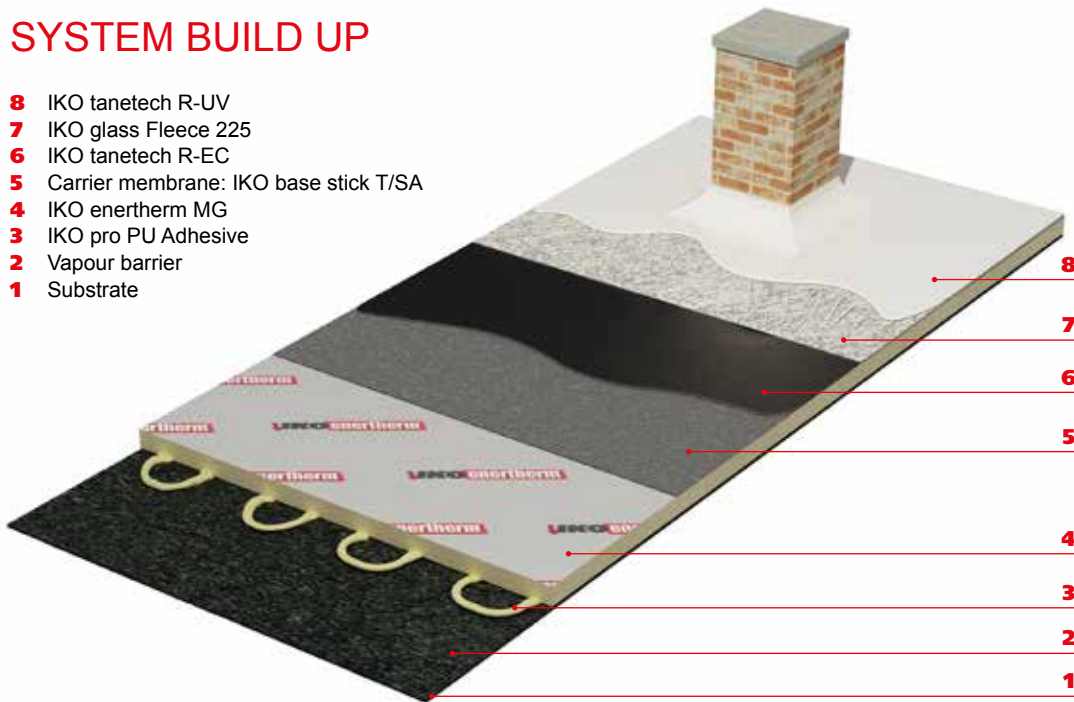
IKO assists its construction partners during all stages of the construction process, from the specifications, through the installation to the delivery of the project and after-care.

In terms of project follow-up, IKO provides technical expertise and advice, in the form of measurements, inspections and presence on site while work is conducted.

For technical assistance before, during or after your project, please contact the IKO project manager or technical support.

SYSTEM BUILD UP

- 8** IKO tanetech R-UV
- 7** IKO glass Fleece 225
- 6** IKO tanetech R-EC
- 5** Carrier membrane: IKO base stick T/SA
- 4** IKO enertherm MG
- 3** IKO pro PU Adhesive
- 2** Vapour barrier
- 1** Substrate



PREPARATION

1 - Working with IKO tanetech Roof

IKO tanetech R-EC and IKO tanetech R-UV are solvent-based single-component resins with PU polymers. The drying time of the resin depends on the relative air humidity and ambient temperature. With a relative humidity level of 50% at 20°C, the resins are rainproof after 1 - 2 hours and 2 mm fully cures within 24 hours.

Before use, mix the IKO tanetech R-EC and IKO tanetech R-UV gently and evenly using a wooden spatula. A mixer must not be used under any circumstances.

It is important to clean tools immediately after use with IKO tech Cleaner.

Once the tin has been opened and the product has not been fully used, it is normal that a skin forms on the product surface. Before using the product, you will need to cut the skin with the tip of a Stanley knife and remove it from the product. Above all, do not mix the skin into the product.

IKO tanetech Roof can be used:

- If the ambient, substrate and resin temperatures are between the minimum and maximum level, as defined in Table 1.
- With a relative humidity level lower than 85%.
- If it is not raining or foggy.
- On a dry substrate, which is not frozen.
- On a substrate that is not affected by rising damp (for example, water vapour from inside the building due to the absence of a vapour barrier or rising damp on a ground floor terrace due to the absence of a moisture barrier under the concrete).

Table 1: Acceptable temperatures when using IKO tanetech Roof

Product	Temperature in °C		
	Ambient	Substrate	Product
IKO tanetech R-EC and R-UV	+5°C - +35°C	+5°C - +30°C	+5°C - +30°C

The temperature of the substrate must be at least 3°C above the dew point during application and curing.

2 - Checking and preparing the substrate

IKO tanetech Roof can only be applied to a substrate that is clean, dry and free of dust, as well as loose particles. The maximum moisture content of the substrate must measure 18% on the wood scale using a Protimeter or a maximum of 6% measured using a Tramex / Doser. The slope of the substrate must be at least 1,5 % towards the water drains in order to prevent water from stagnating. Cracks, blisters, expansion joints and finishes on existing substrate edges must be checked and, if necessary, repaired or replaced.

Table 2 shows the compatibility of IKO tanetech Roof with several substrates, as well as the necessary preparation of these substrates.

Please contact IKO for information about any substrates that are not mentioned in this table.

Table 2: Compatibility of IKO tanetech Roof

Substrate	Preparation	Primer	Comments
1 - Waterproofing membranes			
APP bitumen	Remove all loose particles (talc, sand, flakes) using a stiff brush.	IKO tech Non-Porous Primer	The membrane must adhere sufficiently to the substrate. Any cracks and blisters must first be repaired. Adhesion to a sanded APP bitumen membrane must first be checked.
SBS bitumen	Remove all loose particles (chipping, aggregate) using a stiff brush.	IKO tech Non-Porous Primer	The membrane must adhere sufficiently to the substrate. Any cracks and blisters must first be repaired.
PVC			Not compatible
EPDM			Please contact IKO.
Resitrix			Please contact IKO.
TPO			Not compatible
TPE			Not compatible
PIB			Not compatible
ECB			Not compatible
PE			Not compatible
2 - Cured liquid waterproofing			
1K PU	Clean the membrane.	IKO tech Non-Porous Primer	
1K Hybrid	Clean the membrane.	None	
2K PMMA			Not compatible

Tabel 2: Compatibility of IKO tanetech Roof

Substrate	Preparation	Primer	Comments
3 - Insulation panels			
PIR/ PUR/ EPS/ PF	Prepare roofs by applying a self-adhesive carrier membrane (IKO base stick T/SA).		Please contact IKO.
4 - Mineral substrates			
Concrete and mortar	First abrade the waxed concrete.	IKO tanetech Porous Primer	The substrate must have been in place for at least 28 days. Remove any laitance from the cement. It must have a compressive strength of at least 25 N/mm ² and a tensile strength of at least 1.5 N/mm ² .
Sound tiling	First abrade the substrate.	IKO tanetech Porous Primer	Remove any loose or damaged tiling and repair in order to obtain a sound substrate (resin mortar reinforced with polypropylene fibres, new tiling). First dry out any pockets of water under the tiling.
5 - Metals			
Ferrous metals (steel)	First sand the metallic substrate in order to clean it. All rust must be removed from rusty substrates. First clean using the IKO tech Cleaner solvent.	IKO tech Non-Porous Primer	
Non-ferrous metals (aluminium, copper, lead, zinc)	First sand the metallic substrate in order to clean it. All rust must be removed from rusty substrates. First clean using the IKO tech Cleaner solvent.	IKO tech Non-Porous Primer	
6 - Hard plastics			
PVC	First sand the substrate in order to make it rough. First clean using the IKO tech Cleaner solvent.	IKO tech Non-Porous Primer	
Polyester	First sand the substrate in order to make it rough. First clean using the IKO tech Cleaner solvent.	IKO tech Non-Porous Primer	
PE and PP			Not compatible
7 - Wood			
Treated wood		IKO tech Non-Porous Primer	Must first be treated for all outdoor applications. Chipboard panels must be water-resistant.
8 - Glass			
Mineral glass			Not compatible
Acrylic glass			Not compatible

2.1 - Applying the primer

Activate the IKO tanetech Porous Primer: Thoroughly mix each component separately. Pour the 2 components in one after the other and mix everything together until you obtain a homogeneous mixture. It is advisable to use a mechanical mixer.

Apply the primer (IKO tanetech Porous Primer or IKO tech Non-Porous Primer) with a brush or short nap roller, using 0.1 – 0.2 L/m². Leave the IKO tanetech Porous Primer to dry and wait until it becomes transparent and is no longer sticky (± 3 hours). Leave the IKO tech Non-Porous Primer to dry for 30 minutes.

If the layer of IKO tanetech R-EC is not applied within 2 days, repeat this treatment.

INSULATION (OPTIONAL)

Add a vapour barrier, if there is not already one present.

Fit IKO enertherm MG PIR insulation panels of the required thickness using IKO pro PU Adhesive, IKO pro Fix gun or IKO pro Sprayfast adhesive or mechanical fasteners.

Apply IKO base stick T/SA as a self-adhesive carrier membrane and remove any sand particles using a stiff brush.

APPLYING THE WATERPROOFING

General:

If you wait more than 2 days before applying a layer of IKO tanetech R-EC or IKO tanetech R-UV to a treated substrate, the substrate must be cleaned and treated with IKO tech Non-Porous Primer as a reactivation primer.

1. Detail connections

Apply a layer of IKO tanetech R-EC using 1.5 L/m². Roll a piece of reinforcement fleece (IKO glass Fleece 225 made from 225 g/m² glass fibres) on the wet coating, press the fleece into the first layer using a dry roller and make sure that the fleece is fully saturated with IKO tanetech R-EC. There must not be any air bubbles between the first layer and the reinforcement membrane. Make sure that you leave a 5 cm overlap on the edges of the reinforcement fleece.

Once the first layer has cured, apply a layer of IKO tanetech R-UV using 1 L/m².

For high details and upstands, it is advisable to replace IKO tanetech R-EC and IKO tanetech R-UV with a viscous resin (IKO tanetech Detail).

2. Main roof section

Apply a layer of IKO tanetech R-EC using 1.5 L/m². Roll a reinforcement fleece IKO glass Fleece 225 (made from 225 g/m² glass fibres) on the wet coating, press the fleece into the first layer with a dry roller and make sure the fleece is fully saturated with IKO tanetech R-EC. There must not be any air bubbles between the first layer and the reinforcement fleece. Make sure that you leave a 5 cm overlap on the edges of the reinforcement fleece.

Once this layer has cured, apply a layer of IKO tanetech R-UV using 1 L/m².

DETAILED TECHNICAL DRAWINGS

Please contact IKO.

MAINTENANCE

The durability of the waterproofing can be guaranteed, provided:

- The waterproofing is not subject to ponding water for an extended period.
- The surfaces are regularly maintained according to the current regulations.
- The waterproofing is used for its initially intended purpose.

Compliance with the following maintenance instructions determines the life span of the waterproofing system.

Maintenance begins as soon as the work is accepted. It consists of regular inspections and at least one annual visit, which must be conducted before the end of autumn.

Maintenance tasks include:

- Keeping the (rain) water drainage system in a good state of repair.
- Regular removal of grass, moss and vegetation.
- Removal of fallen leaves at the end of autumn.
- Keeping the small accessories (flashings, joints) and large structures (drain profiles, plinths, gutters, etc.) in a good state.
- Repair of any cracks detected.

Advice for use:

- Do not attach anything to the treated surface.
- Do not pour any aggressive products onto the surface, even if they are emptied directly into the drains.
- Do not make any changes without consulting an IKO specialist.

IKO PRODUCTS USED IN THIS SYSTEM

IKO flexia:

- IKO glass Fleece 225
- IKO tech Non-Porous Primer
- IKO tanetech Porous Primer
- IKO tanetech R-EC
- IKO tanetech R-UV

IKO roofing: - IKO base Stick T/SA

IKO enertherm: - IKO enertherm MG

IKO pro:

- IKO pro PU Lijm
- IKO pro Fix gun
- IKO pro Sprayfast

The technical information regarding the application of liquid waterproofing products supplied by IKO is provided in good faith on the basis of IKO's current know-how and experience, and assumes that these products will be used in accordance with the above-mentioned recommendations, under normal circumstances, and that these products were stored and handled in the correct manner. The above-mentioned information is only intended to inform the user about the various properties and/or recommendations and can in no way be considered as a guarantee with regard to the merchantability and suitability for a specific purpose in view of the continuously changing environmental factors, including the specific conditions at the building site, the use of different materials and substrates, etc. As a result, and with the exception of binding legal stipulations to the contrary, IKO cannot be held liable on the basis of the provided information, and any other written recommendations and/or advice. Please contact IKO if you have any doubts regarding the processing, the end use or the application of these products. Users are recommended to consult the most recent edition of the technical data sheet. A copy of this will be provided upon request or can be obtained from www.ikoflexia.com