

# Triflex

Delivering solutions together.

From the liquid applied waterproofing specialist  
**Balcony systems.**



BALCONIES | ROOF TERRACES | WALKWAYS

Triflex solutions for balconies, roof terraces and walkways

## Multiple challenges. One solution.

Every day great demands are placed on balconies, roof terraces and walkways as a result of weather conditions and mechanical loads. Door and window joints, penetration such as railing posts and junctions are particularly susceptible. Here, moisture penetration, concrete flaking and corrosion of reinforcements can cause permanent damage and have an impact on the fabric of the building. Triflex balcony systems offer a solution to handle even the most demanding challenges with ease. High-quality products, almost 40 years of experience and know-how paired with a comprehensive and expert service make Triflex the partner to turn to when it comes to premium balcony systems.



Triflex system strengths

## From us. For you. Great advantages.

Lasting protection of the structure against damp and moisture.

**Long service life, high strength and considerable increase in property value.**

Fast-curing liquid applied waterproofing.

**Reduced execution times, short closure periods, increased efficiency.**

Highly elastic, dynamic crack-bridging, perfect layer bonding.

**Long-lasting functional solutions which ensure great planning reliability.**

Fleece-reinforced waterproofing of details, junctions, joint areas and surfaces.

**Long-lasting waterproofing means safety especially in areas subject to high loads.**

Can be applied even at low temperatures.

**Reliable planning and application regardless of the weather conditions and time of year.**

# Thoroughly impressive.



## **Unbeatably versatile.**

New builds or refurbishments, fire protection, thermal insulation, non-slip finishes, gradients, substrates at risk of cracking: with Triflex you have the ideal, customised and long-lasting solution to meet every challenge.



## **Extremely durable.**

Triflex solutions are certified in the highest performance categories and have performed successfully in extensive tests and in long-term practical use. The expected service life of the waterproofing in accordance with ETAG 005 is 25 years.



## **Extremely waterproof down to the smallest detail.**

Projections, joints, joint details on window elements, structural movement where components meet and cracks: Triflex solutions come into their own when handling complicated details. The flexible material together with the fleece reinforcement ensures seamless and jointless waterproofing.

Slip resistance in a variety of classes.

**Maximum anti-slip protection in all areas.**

Flame-retardant systems which satisfy the more stringent fire safety requirements.

**Great project diversity and maximum safety.**

Waterproofing and wearing layer in one, very slim design.

**Safe framing of balcony doors which makes refurbishments possible without major structural interventions.**

Low net weight of system components.

**No impact on the structure.**

Variety of surface shapes and colours.

**Attractive design options, can be easily refreshed.**

High-quality surfaces.

**Long-lasting appearance, easy maintenance and a surface which can be walked on immediately.**

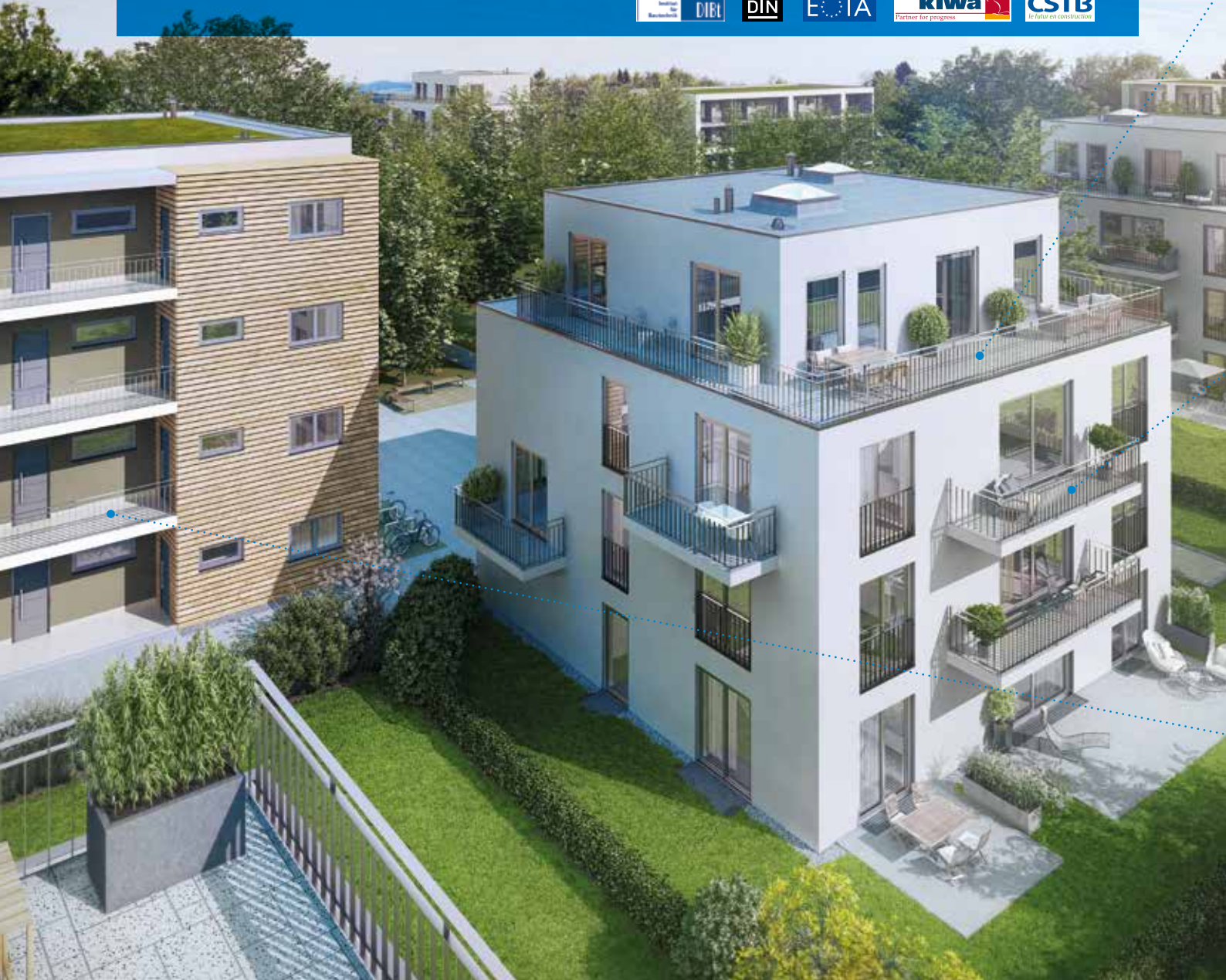




## Exceptional safety. Exceptional conformity.

With Triflex systems you have complete peace of mind whatever the application. At Triflex, we regard continuous internal and external quality controls in production and extensive field tests prior to market launch as essential.

- Highest possible categories as per ETAG 005 (W3, M and S, P1-P4, S1-S4, TL4, TH4).
- Approved without restrictions for all used surfaces.
- Triflex system warranty.
- Continuously enhanced and optimised products.



## Roof terraces & loggias



**Full-surface fleece-reinforced**  
for premium waterproofing especially above occupied rooms.



**Safe framing**  
of balcony doors with low junction heights.



**Other coverings**  
Full-surface fleece-reinforced waterproofing below all types of other coverings.

## Balconies



**Swift refurbishment**  
in a single day.



**Protection**  
against mechanical loads; UV- and weather-resistant.



**Barrier-free living**  
thanks to slim design and low junctions.



**Great design freedom**  
with more than 70 colours and 4 different surface finishes.

## Walkways & staircases



**Improved fire safety**  
in line with German regional building regulations (LBO) thanks to special flame-retardant additives.



**Effective anti-slip protection**  
due to a variety of wear-resistant dressing options.



Balcony waterproofing system

# Triflex BTS-P

## System strengths

- + Dynamic crack-bridging
- + Waterproofing system designed for universal application
- + Also available as a flame-retardant version (S1)
- + Particularly thick layers (approx. 4–5 mm)
- + Withstands high mechanical loads
- + Full surface flexibility
- + Highest performance classes as per ETAG 005

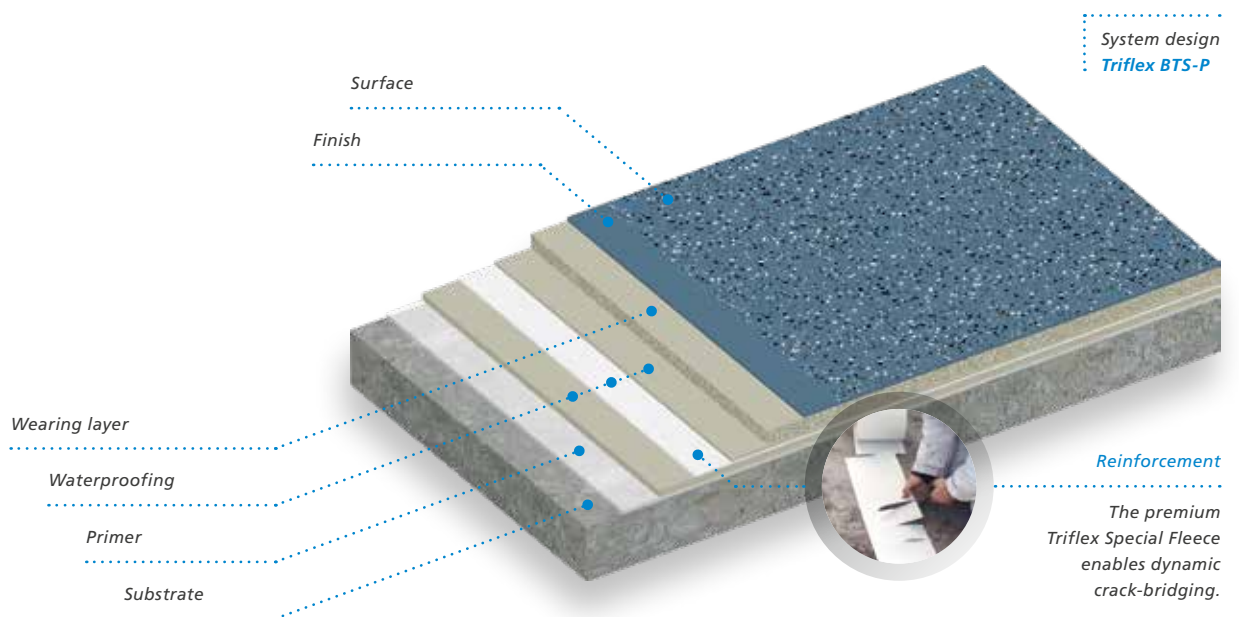


## Applications

- Roof terraces
- Balconies
- Walkways

## Premium waterproofing

Specifically designed for specialist applications, e.g., roof terraces and above occupied rooms or substrates with a high risk of crack formation. The full-surface fleece-reinforced waterproofing can be walked on immediately, is able to withstand high mechanical loads and ensures long-term protection of the building structure.



## Balcony coating system **Triflex BFS**

### System strengths

- + Surface protection system OS 8 as per DIN V 18026 / Rili SIB
- + Ready for use again after just a few hours
- + Particularly ideal for refurbishments
- + Thick layers (approx. 3–4 mm)
- + Also available as a flame-retardant version (S1)
- + Low mass per unit area of less than 10 kg/m<sup>2</sup>
- + Economic design, high degree of efficiency

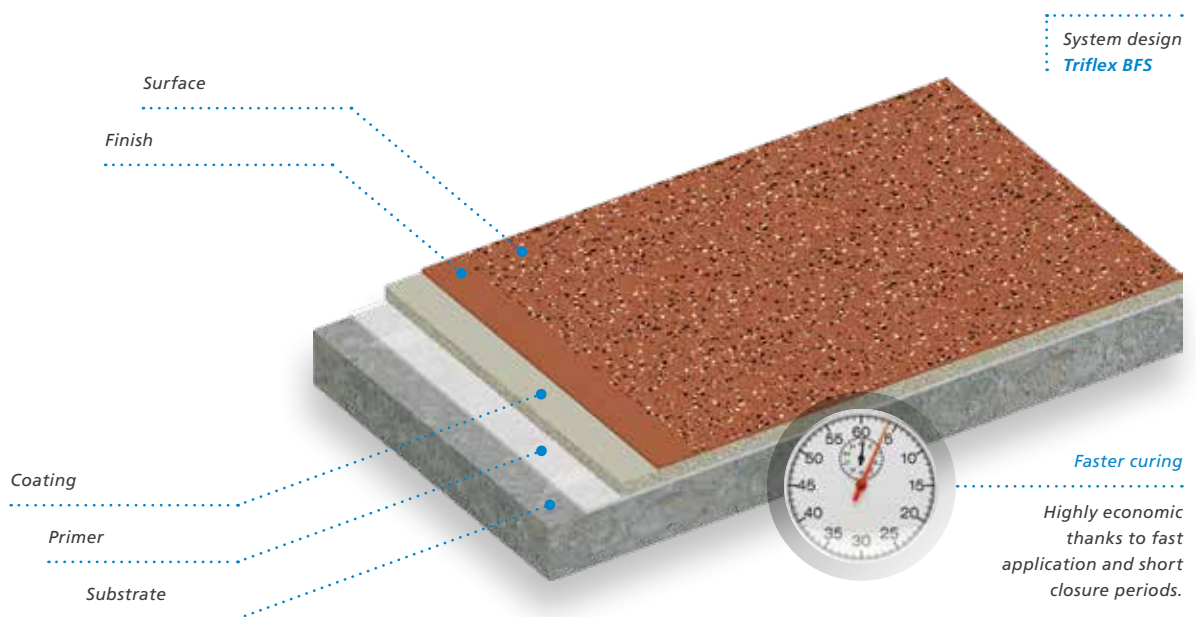
### Applications

- Roof terraces
- Balconies
- Walkways



## The economic coating solution.

A thick-layer solution developed specially for balconies and walkways, which permanently withstands high mechanical loads and effects of the weather. The resilient coating system can be applied to almost all substrates and helps to save time and the expense of removing existing coatings.



Triflex surface finishes

## 4 surface finishes. More than 70 colours. Countless possibilities.

Colours create visual highlights on balconies and walkways, giving them a unique charm. Triflex offers 4 different surfaces and more than 70 colours to choose from when designing.

**Triflex Chips Design** is a combination of the decorative dressing material Triflex Micro Chips and more than 50 different colours. Quartz sand can also be added to increase anti-slip properties.



As a dressing mixture available in eight appealing colours, **Triflex Colour Design** enhances the look of balconies and roof terraces. The result is unique, beautiful, low-maintenance flooring.



**Triflex Stone Design** is the perfect solution for your small roof garden. The UV-resistant material optimally protects the fabric of the building from excess water, is durable, frost-resistant, has long-lasting aesthetics and additionally ensures excellent drainage.



**Triflex Creative Design** combines state-of-the-art, long-term reliable waterproofing technology with a unique range of design options. With Triflex Creative Design you can give your imagination free rein.



Discover what balconies with Triflex actually look like. Simply try out different surface finishes and design options using your own photo: [www.triflex.com/studio](http://www.triflex.com/studio)



Waterproofing system under other coverings

# Under foot. Extremely robust.

The high-quality and versatile Triflex systems can handle all waterproofing challenges even with other coverings including wood, tiles and slabs. The waterproofing system Triflex BWS impresses both due to its robustness and its low build-up of just a few millimetres. It can be used under loosely laid wooden panels, heavy slabs and firmly adhered tiles to offer safe and long-lasting protection.



## Triflex BWS

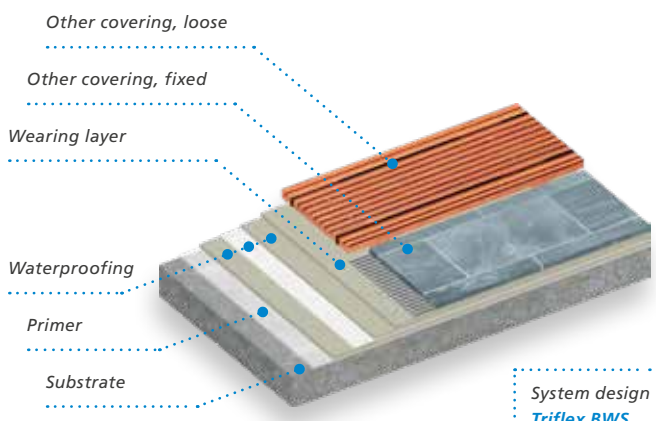


<b>CE</b>	
<b>Triflex 04</b>	
<b>ETA-04/0019</b> Balcony waterproofing Triflex ProTerra	
Usage categories:	
Stress from external fire exposure in compliance with DIN EN 13501-5:	Classes B <sub>floor</sub> (t1), B <sub>floor</sub> (t2), B <sub>floor</sub> (t3)
Fire classification DIN EN 13501-1:	Class E
Service life:	W3
Climate zones:	M and S
Payloads:	P1 to P4
Roof pitch:	S1 to S4
Lowest surface temperature:	TL4
Highest surface temperature:	TH4
Statement on hazardous substances:	none contained

<b>CE</b>	
<b>Triflex 06</b>	
<b>ETA-04/0269</b> Roof waterproofing Triflex ProDetail	
Usage categories:	
Stress from external fire exposure in compliance with DIN EN 13501-5:	Classes B <sub>floor</sub> (t1), B <sub>floor</sub> (t2), B <sub>floor</sub> (t3)
Fire classification DIN EN 13501-1:	Class E
Service life:	W3
Climate zones:	M and S
Payloads:	P1 to P4
Roof pitch:	S1 to S4
Lowest surface temperature:	TL4
Highest surface temperature:	TH4
Statement on hazardous substances:	none contained

### System strengths

- + Alkali- and hydrolysis-resistant
- + Also suitable for tile adhesive
- + Full-surface-reinforced
- + Highest classification as per ETAG 005



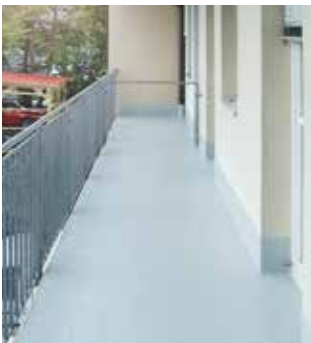
Flame-retardant system versions

# Safety on walkways.

The outside areas of homes and offices have to fulfil multiple demands in terms of safety. Walkways often serve as escape and rescue routes and therefore have to comply with the strict fire safety requirements of the German regional building regulations (LBO). Our walkway solutions not only protect the structure from the elements, but also satisfy the stringent fire safety requirements. As such, they guarantee contractors, planners and residents maximum safety.

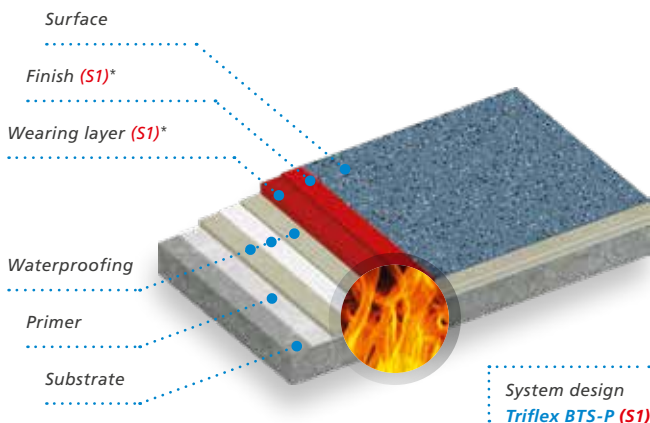


## Triflex BTS-P (S1) Triflex BFS (S1)

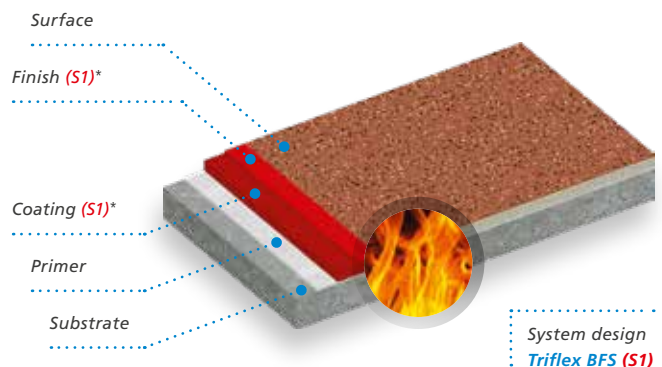


### System strengths

- + Unique, fleece-reinforced S1 waterproofing system Triflex BTS-P
- + Versions of the tried-and-tested Triflex BTS-P and Triflex BFS systems
- + **Flame-retardant as per DIN 4102 and DIN EN 13501-1**
- + Building Supervisory Authority Test Certificate in accordance with the German Building Regulations List A, Part 2, No. 2.10.3



\* with special additives



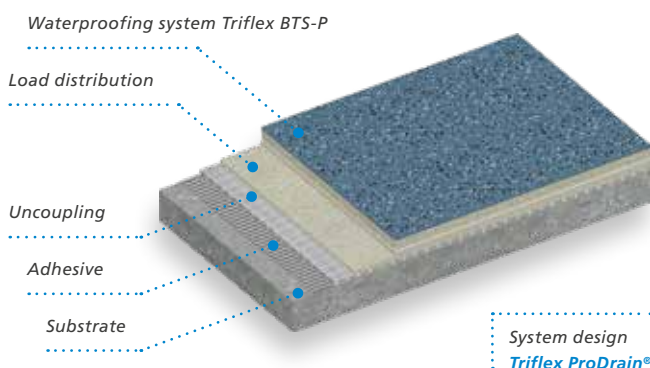
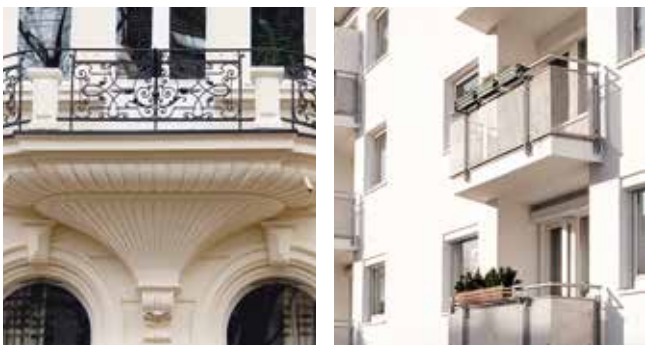
Balcony uncoupling system

## Without demolition. With ventilation.

Balconies and roof terraces are often only refurbished once the substrate is heavily saturated or contaminated. Cracks result, the load bearing construction is damaged, old tiles must be removed. Our solution avoids expensive and time-consuming refurbishment measures: special uncoupling technology together with the Triflex BTS-P balcony waterproofing system guarantees optimal ventilation, complete drying and rubble-free refurbishment.



## Triflex ProDrain®



### System strengths

- + Only system to check crack-bridging in accordance with TR-013 as per ETAG 005 (4 mm crack-bridging at -10 °C)
- + Classification in payload P4 as per ETAG 005
- + Tested functionality in terms of compressive strength, drying properties and dynamic crack-bridging by KIWA
- + Swift refurbishment in 2–3 days
- + Channels moisture out of the substrate permanently
- + Bubble- and bulge-free drying



Balcony insulation system

# Perfectly insulated. Perfectly protected.

Thermal insulation has an important role to play both in new builds and older buildings in particular. If this is insufficient, damage caused by damp and mould formation can occur. Our specially coordinated system components protect the insulated surfaces and prevent precisely this damage.

The low height of the Triflex system allows more build-up height for the insulation and thus greater flexibility when designing and waterproofing.

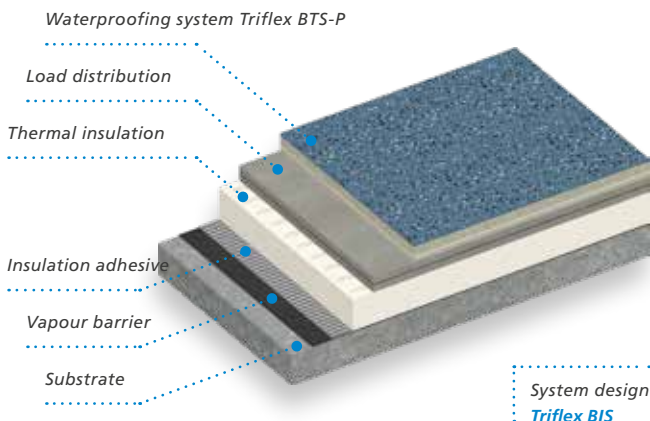


## Triflex BIS



### System strengths

- + Reduction of heating costs
- + Also suitable for balconies with low door sills.
- + Full-surface load-distribution layer
- + Height adjustment for barrier-free transitions
- + Full-surface adhered design, no perforation of the vapour barrier
- + Also available as a flame-retardant version (S1)
- + Swift refurbishment in 2–3 days



Stair coating system

## Closed briefly. Protected for longer.

Stairs are subject to high mechanical and weather-related loads and have to be non-slip. Triflex TSS offers thick-layer protection, levels out surfaces, and even complex details such as balustrade posts are reliably waterproofed.

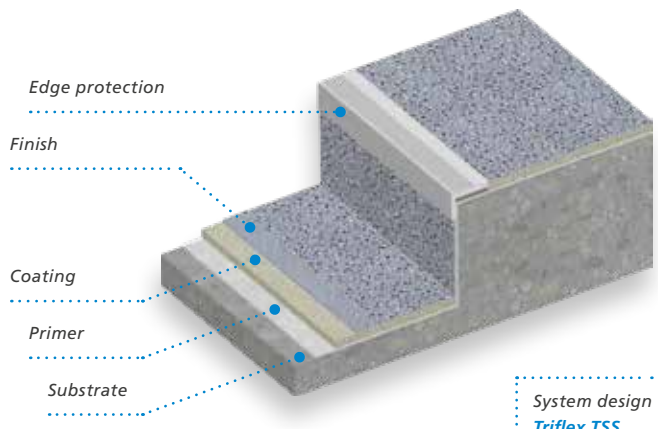


## Triflex TSS



### System strengths

- + Hardwearing surfaces up to non-slip class R 12
- + Highly abrasion-resistant
- + Surface protection system OS 8 as per DIN V 18026 / Rili SIB
- + Also available as waterproofing







### Triflex project expertise

As a manufacturer and direct distributor of liquid applied waterproofing for balconies, roof terraces and walkways, we have almost 40 years of project experience and always offer customised solutions to meet your requirements. We ensure ideal cooperation between contractors, planners, our staff and systems. The channels are short and direct, and personal contact is guaranteed without complications. Welcome to the Triflex family.



### Triflex training expertise

We communicate our know-how directly and bypass trade intermediaries: we train and provide advice before, during and after the project. This guarantees the best possible application results, optimal solutions and long-term satisfaction.



MORE THAN JUST BALCONY SYSTEMS.



### Triflex quality

- Highest possible categories as per the European Technical Approvals (ETAG 005).
- Approved without restrictions for all used surfaces.
- Triflex system warranty.
- Continuous internal and external quality controls as well as enhancement and optimisation of products.



### Triflex service

This is where we as a manufacturer and direct distributor are closer to the action: we support and supervise your project with our technical advisers and applications engineers. We deliver to the construction site on schedule, offer advice from the word go, help you with offers and use our technical expertise to assist with execution and, in doing so, guarantee the long-term success of your project.



Triflex balcony systems

# Reference projects.



### Augustusburg Castle, Brühl (DE)

- Component: Terrace
- Project size: 2,500 m<sup>2</sup>
- System: Triflex BWS
- Completion: 2014



### Nursery Waldemar, Berlin (DE)

- Component: Walkway
- Project size: 148 m<sup>2</sup>
- Systems: Triflex BIS, Triflex BTS-P
- Completion: 2013



### Detached house, Feldkirchen (AT)

- Component: Roof terrace
- Project size: 40 m<sup>2</sup>
- Systems: Triflex ProDrain, Triflex BTS-P
- Completion: 2013



### Detached house, Amstetten (AT)

- Component: Balcony
- Project size: 18 m<sup>2</sup>
- System: Triflex Creative Design
- Completion: 2013



### Apartment house, Kaarst (DE)

- Component: Walkways
- Project size: 200 m<sup>2</sup>
- System: Triflex BTS-P (S1)
- Completion: 2013



### Apartment house, Seuzach (CH)

- Component: Balconies
- Project size: 360 m<sup>2</sup>
- System: Triflex BTS-P
- Completion: 2005

Triflex balcony systems at a glance

# The best solution for you.

Requirement	Waterproofing systems		Coating systems		Ancillary systems <sup>1</sup>	
	Triflex BTS-P	Triflex BWS	Triflex BFS	Triflex TSS	Triflex ProDrain®	Triflex BIS
On substrates at risk of dynamic cracking	●	●			●	●
On substrates at risk of static cracking	●	●	●	●	●	●
Over occupied spaces	●	●		○	●	●
Under other coverings, such as tiles and paving		●				
Suitable for stairs				●		
Withstands high mechanical loads	●	●	●	●	●	●
Flame resistant for escape routes <sup>2</sup>	● (S1)		● (S1)	● (S1)		● (S1)
Non-slip surface	●		●	●	●	●
Over damp substrates					●	
Over soiled, cracked substrates					●	
With thermal insulation layer						●
Test certificates (selection) <sup>3</sup>	ETA		EN 1504 / DIN V 18026 ETA for detail waterproofing		ETA for waterproofing KIWA test report	ETA for waterproofing

<sup>1</sup> Ancillary systems can only be applied in combination with the balcony waterproofing system Triflex BTS-P

<sup>2</sup> Flame-retardant as per DIN 4102 and DIN EN 13501-1

<sup>3</sup> Further information available in the system descriptions

Information on the surface versions **Triflex Stone Design** and **Triflex Creative Design** can be found in the respective system descriptions.

# Triflex

Delivering solutions together.

## International

Triflex GmbH & Co. KG  
Karlstrasse 59  
32423 Minden | Germany  
Fon +49 571 38780-708  
international@triflex.com  
www.triflex.com

