

# Product Range

## Waterproofing Systems



 **KEMPER**  
SYSTEM

## What is KEMPEROL®?

KEMPEROL® is a liquid, reactive resin-based waterproofing system. It is applied in liquid form and reinforced with a layer of polyester fleece. A chemical bonding reaction sets the liquid resin, forming a permanently elastic, seamless waterproof membrane that adapts perfectly to the specific features of the substrate. The liquid resin membrane bonds fully with the substrate, providing long-lasting, dependable protection.

KEMPEROL® is reinforced with fleece to:

- cover small cracks
- increase toughness and durability
- limit expansion
- regulate layer thickness



## An overview of KEMPEROL products and applications

Application/ System	Flat roofs and penetrations	Balconies, terraces and rooftop decks	Par parks	Interior rooms
Solvent-free	KEMPEROL® 2K-PUR KEMPEROL® 1K-SF (PUR)	KEMPEROL® 2K-PUR (PUR)	KEMPEROL® 2K-PUR (PUR)	KEMPEROL® 2K-PUR KEMPEROL® 022 (PUR)
Rapid curing	KEMPEROL® AC (PMMA)	KEMPEROL® AC (PMMA)	KEMPEROL® AC (PMMA)	
Single component	KEMPEROL® 1K-PUR KEMPEROL® 1K-SF (PUR)	KEMPEROL® 1K-PUR (PUR)		
Classic	KEMPEROL® V 210 (UP)		KEMPEROL® BR (UP)	

UP = flexible unsaturated polyester resin

PUR = flexible polyurethane resin

AC or PMMA = flexible reactive polymethylmethacrylate





## KEMPEROL® 2K-PUR

The solvent-free waterproofing system for interior and exterior applications

KEMPEROL® 2K-PUR is a solvent-free, fleece reinforced, polyurethane-based liquid waterproofing system. This odourless product can be universally used on roofs, balconies, terraces and internal areas, such as bathrooms, kitchens or utility rooms. It is ideal for sensitive environments, such as nurseries, schools, hospitals or nursing homes.

KEMPEROL® 2K-PUR is also ideal for waterproofing car parks. The liquid system has short-term heat resistance of up to 250°C and is recommended for use under mastic asphalt.

KEMPEROL® 2K-PUR is completely solvent-free and complies with sustainability criteria. Around 80% of the resins used in this product are obtained from renewable sources (castor oil).



## KEMPEROL® 022

The solvent-free waterproofing system for interior areas under ceramic tiles

The KEMPEROL® 022 waterproofing system is a solvent-free, liquid-applied system which is reinforced with fleece and can bridge joints up to 2mm and cracks up to 1.5mm. Tiles can be glued direct on top of the cured membrane with KEMPERDUR® MT Mineral Tile Adhesive. KEMPEROL® 022 waterproofing is certified according to ETAG 022 and can be used on walls and floors in wet rooms with direct or indirect loads and floor drainage.







## **KEMPEROL® V 210**

### Classic roof waterproofing

KEMPEROL® V 210 is a 3-component, fleece reinforced, liquid waterproofing system. KEMPEROL® V 210 forms a seamless elastic membrane that can accommodate structural details and penetrations. The membrane provides durable protection for even complex details: parapets, balustrades, roof lights, ventilators, supports, anchorage points, lightning conductors and other penetrations are seamlessly incorporated in the membrane. As well as flat roofs, this liquid polyester-based system can also be used on radio masts, for historic buildings, for covered walkways, water details, new builds and for repairs.



## **KEMPEROL® 1K-PUR and KEMPEROL® 1K-SF**

### For complex details

Fast and easy to apply, KEMPEROL® 1K-PUR and KEMPEROL® 1K-SF are exceptionally cost-effective waterproofing products. With no mixing or waiting time needed, these single component systems are applied straight from the can to the substrate. Used with fleece reinforcement, the material is ideal for applications in confined spaces, such as balconies, terraces and complex structural details on roofs. Providing quick and easy protection of roof lights, drains, wall connections and other details, this liquid polyester membrane is the ideal solution for combined waterproofing where the areas are protected using conventional methods and the details waterproofed with a liquid solution.



## KEMPEROL® AC

The rapid-curing waterproofing and surfacing system

KEMPERDUR® AC is a 2-component system that can be used as a waterproofing surface (with fleece reinforcement) or as a surfacing system (high-build coating with quartz sand). The product is based on rapid curing polymethylmethacrylate resin (PMMA). With KEMPEROL® AC many jobs, e.g. balcony refurbishing with waterproofing and surfacing, can be completed within a day. KEMPEROL® AC can be used as a surface solution for all substrates that need a wearing course but not necessarily waterproofing, including parking spaces in car parks and covered walkways.

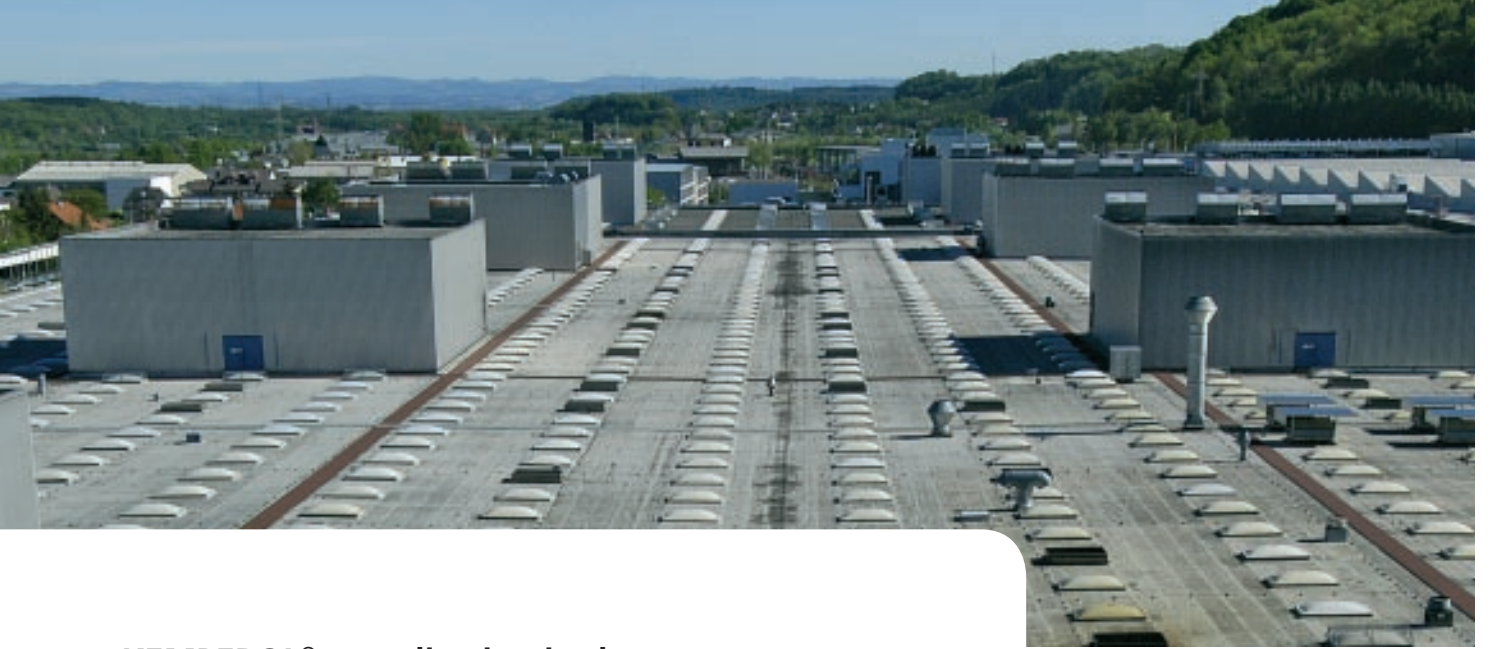


## KEMPEROL® BR

The waterproofing solution for bridges and car parks

KEMPEROL® BR is a 3-component, reinforced, polyester resin-based (UP) system that can be used on extreme applications and areas subject to heavy traffic, such as bridges and car parks. This certified system protects concrete structures and civil engineering applications lastingly against water and corrosion damage. KEMPEROL® BR can be used under asphalt, slabs or paving stones and can be applied with a colour quartz wearing layer on concrete and weathered asphalt. Mastic asphalt can be poured at 250°C without damaging the membrane. Permanently-elastic KEMPEROL BR bridges cracks up to 2mm even on concrete.





## KEMPEROL® – application in three easy steps

Liquid, wet-on-wet waterproofing systems are applied in three steps. The substrate must be properly prepared and the work carried out in suitable weather conditions. Please refer to the technical data sheets for specific instructions for each product.



Application in three easy steps: first, two thirds of the material are applied.



Second, the fleece is rolled in without bubbles or creases.



Third, the remaining third of the material is applied to saturate the fleece.

After curing, the surface is ready for foot traffic or an additional topcoat can be applied.

KEMPEROL® can be used with the KEMPERATOR application machine for faster and more efficient application on larger areas.





## Advantages at a glance

### Liquid application

- No seams or joints
- Applied cold, no naked flame needed
- No plasticisers
- No wastage
- Minimum film thickness
- Low imposed weight
- Suitable for waterproofing in barrier-free rooms

### Forms a seamless bond with the substrate

- No mechanical fixtures needed
- Resistant to wind suction

### Bonds to almost all substrates

- Forms a permanent bond between the old and the new surface (in most cases it is not necessary to remove the old material)
- Any penetrations and upstands installed at a later point can be easily incorporated
- A variety of different materials/substrates can be incorporated in the surfacing system

### Fleece-reinforced

- Capable of withstanding (temperature-related) material expansion and contraction on a variety of substrates
- Withstands structural movement
- Bridges crack and joints up to 2mm wide

### Certified according to ETAG 005, W3 categorisation

- Certified expected working life of 25 years
- Permanently elastic from -30°C to +90°C
- EN 13501 fire rating
- UV-resistant: will not become brittle, not additional protective coating required
- Vapour-permeable: allows damp substrates to dry



## Approvals

- ETAG 005, W 3 categorisation (certified expected working life of 25 years)
- ETAG 022 (waterproofing wet rooms)
- General technical certificates
- Waterproofing with tiles and slabs
- FLL approval (root resistance)
- VKF certification (CH)
- BBA (GB) certification
- ASTM (USA) certification
- Bureau Veritas (F) certification



KEMPEROL® products may only be applied by authorised contractors. Our partners are required to complete a rigorous training programme with regular refresher courses. This is part of a total quality system that ensures optimum product application and customer satisfaction.



## Technical support and services

- Expert advice and support from our experienced technical design team
- Advice on repair projects
- Full project specifications
- Technical advice and guidance for the duration of the project
- Training courses for KEMPEROL® contractors on-site, KEMPEROL® training sessions at the KEMPER SYSTEM Training Centre and regional courses
- For detailed product information, please contact us or visit our website