

KEMPEROL 1K-PUR

Description

Kemperol 1K-PUR is a polyurethane-based, single pack system that forms a permanently elastic, seamless, yet highly permeable membrane.

Extremely durable and tear-resistant, it can accommodate structural details and penetrations without the need for additional mechanical fixings.

Uses and Applications

1K-PUR is suited to a wide range of applications, typically small repairs where a ready-to-use product is the more economic alternative

- roofs
- balconies
- terraces
- podiums
- gutters
- complex detailing

Advantages

- Single-pack
- Ideal for details, patch repairs, gutters etc.
- Cold-applied liquid polymer
- Moisture-triggered polyurethane
- Fully reinforced
- Fully bonded
- Seamless
- UV stable
- Vapour permeable
- Excellent elasticity and tensile strength

Performance

- Highly durable and long lasting
- Weather resistant after 30 minutes
- Suitable for normal maintenance foot traffic

Approvals and Authority

European Technical Approval Certificate No ETA-03/0043

NBS specifications are available for the following applications

- J31 110 Roof Coatings
- J31 120 Warm Roof Coatings
- J31 130 Inverted Roof Coatings

TECHNICAL INFORMATION

System Information and Application

The Kemperol 1K-PUR system comprises a single pack polyurethane resin applied onto a primer and reinforced with a polyester fleece. Optional decorative wearing courses can be applied.

Kemperol 1K-PUR System Build up

- Prepared Substrate
- Kemperol Primer
- Kemperol 1K-PUR Resin
- Polyester Reinforcing Fleece
- Kemperol 1K-PUR Resin
- Optional Decorative Wearing Course

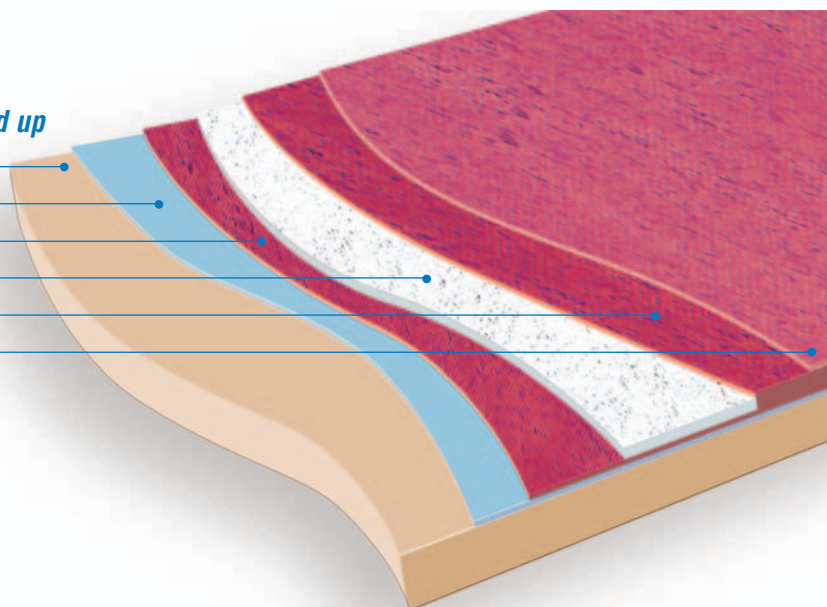


Table 1: Priming Table

SUBSTRATE	KEMPEROL D PRIMER	KEMPEROL R PRIMER	KEMPEROL EP PRIMER
Bituminous roof sheet	✓	✓	✓
Asphalt	✓	✓	✓
Concrete, screed	✓	✓	✓
Single ply membrane	!	!	!
Brickwork	✓	✓	✓
Glazed/Non-glazed tiles	!	!	✓
Glass	!	!	✓
Copper	✓	✓	✗
Lead	✓	✓	✗
Wood panels, plywood, chipboard, OSB	✓	✓	✓
Polyurethane insulation boards (refer to Kemper for other insulating materials)	✓	✓	✓
Aluminium, galvanised steels, zinc	✓	✓	✗
Asbestos tiles and profiled sheets	✓	✓	✓

Key: ✓ Suitable ! Individual test necessary ✗ Not applicable

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Substrate Preparation

Kemperol 1K-PUR can be applied to most commonly occurring substrates. See Table 1 for appropriate primer to use.

Kemperol 1K-PUR must be applied in accordance with the manufacturer's instructions.

Substrates to which the coating is to be applied must be dry, clean and free from loose particles, paint, grease and oil or other contaminants which may affect the adhesion of the system.

Substrates should also be free from physical defects such as cracks, joints, insecure sheets etc. Any such deformities should be repaired prior to application, in accordance with the manufacturer's instructions. The product is designed to bridge cracks up to 2mm.

When renovating old roofs, blisters must be split open, pressed down and sealed, and cracks and small surface defects made good.

Install any new edge trim as required.

The substrate should be primed with the appropriate primer, in accordance with the manufacturer's instructions.

Priming

Primers are applied by brush or roller to seal the substrate prior to application of the Kemperol 1K-PUR resin. Typical coverage rate in each case is 0.3kg per m² depending on substrate porosity and profile.

Waterproofing

Prior to application to the main roof area, any protrusions and upstands are to receive the waterproofing resin and fleece first. Refer to Kemper System standard details for further guidance on methodology.

The Kemperol 1K-PUR resin is applied by roller at a coverage rate of 3 kg/m² with Kemperol AP Fleece. Coverage will vary slightly depending on complexity of details.

Two-thirds of the resin is applied first and Kemperol Fleece is embedded and saturated. The remaining one-third of the resin is applied while the first application is still wet. All fleece sections should overlap by a minimum 50mm and, where possible, the minimum upstand height should be 150mm.

The waterproofing should be applied so as to complement any cavity tray or other waterproofing interface detail. The system is rainproof after 30 minutes, can be walked on after 6 hours and is fully cured after 3 days depending on ambient conditions. Kemperol 1K-PUR Thinner may be used to reduce the viscosity of the resin, particularly in colder working conditions.

Work must not be carried out if rain is imminent and the ambient temperature at the time of application must be between 5°C and 35°C. The temperature of the substrate should be at least 3°C above the dew point. Relative humidity should be below 85%. Site handling and mixing instructions are available on request.

Decorative Wearing Course

A hard wearing decorative course can be applied, providing additional protection and allowing colour options to be considered.

Product Information

SYSTEM COMPONENTS	TYPE	PACK SIZE OPTIONS
Kemperol 1K-PUR	Tin	15kg; 7kg
Kemperol 1K-PUR Thinner	Tin	500ml
Kemperol AP Fleece	Roll	50m x 105cm 50m x 52.5cm 50m x 70cm 50m x 26.25cm
Kemperol Reinforcement Foil	Roll	Roll Length 50m Width 15cm
Kemperol D Primer	Tin	5kg, 3kg and 1kg
Kemperol R Primer	Tin	3kg and 1kg
Kemperol EP Primer	Tin	10kg, 3kg and 1kg
MEK Cleaning Agent	Tin	9kg

A full range of tools and accessories is also available

The information contained herein is correct to the best of our current knowledge, but is to be regarded as non-binding recommendations, not necessarily relevant to specific customer requirements. The onus is on the customer to check this information with regard to suitability in a particular situation. More specific, project-based advice is available from the manufacturer. Application of our products is beyond our control and is therefore the sole responsibility of the customer.

Our products are sold exclusively on the basis of our conditions of sale and delivery.

This technical information supersedes and renders invalid all previous editions.



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