

KEMPEROL

Cold applied liquid waterproofing

KEMPEROL V210 liquid-applied waterproofing membrane

Description

Kemperol V210 is a 3-component, polyester-based 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

V210 is suited to a wide range of applications, typically flat-roof waterproofing, and may be applied over existing materials and in extreme situations when other methods are likely to fail.

- Balconies, terraces and walkways
- Warm roofs as part of Stratex system
- Green roofs as part of KemperGreen system
- Profiled asbestos roof repairs
- Inverted roofs
- Ramps and parking decks
- Cold roofs
- Profiled metal roof repairs

Advantages

- Application exclusively by trained and approved contractors
- Cold-applied liquid polymer
- Fast curing
- Fully reinforced, fully bonds to substrate
- Approved for use in zero pitch situations
- Excellent elasticity and tensile strength
- Vapour permeable
- Root resistant – ideal for “green” roofs according to FLL testing
- UV stable

Performance

- Excellent substrate adhesion
- Wear-resistant
- Suitable for maintenance foot traffic without further protection

Approvals and Authority

British Board of Agrément Certificate No 95/3139
European Technical Approval Certificate No ETA-03/0025
Factory Mutual (FM) Approval No OD646.AM
EXT.FAA fire rating to BS476 Part 3: 1958



NBS specifications are available for the following applications:

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

KEMPEROL V210

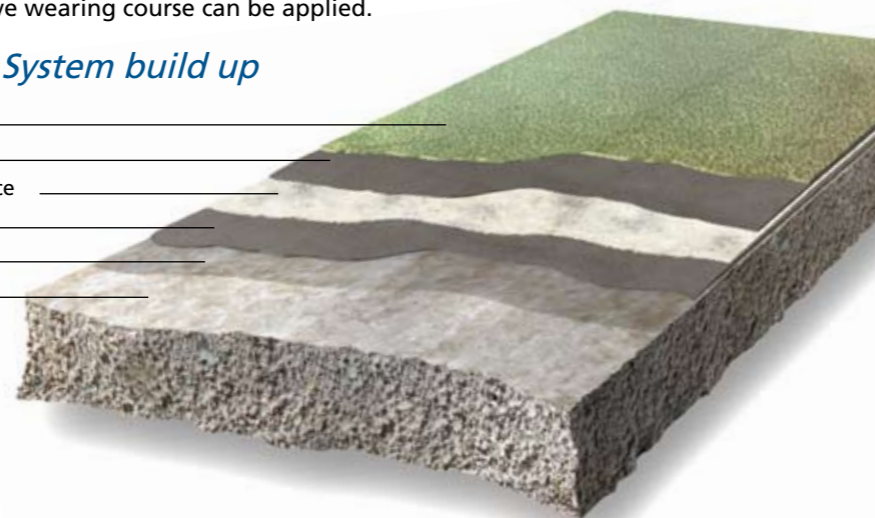
KEMPEROL V210

System information and application

The Kemperol V210 system comprises a 3-part polyester resin applied onto a primer and reinforced with a polyester fleece. Optional talc finish or polyurethane coating is available and decorative wearing course can be applied.

Kemperol V210 System build up

Optional surface coat _____
Kemperol V210 resin _____
Polyester reinforcing fleece _____
Kemperol V210 resin _____
Kemperol primer _____
Prepared substrate _____



Substrate preparation

Kemperol V210 can be applied to most commonly occurring substrates.

Kemperol V210 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.

On refurbishment projects the level of preparation will depend upon the type and condition of the existing coating system. Proper assessment should be made at that time.

Kemper System prefer to bond directly to the base substrate at perimeter details to ensure the long term integrity of the waterproofing system.

Preparation requirements for common substrates

Bituminous sheet

Remove loose chipping where applicable. Cut back to base badly cracked and defective areas of felt. Star cut blisters, dry out and re-bond. On a solid wall construction, where practicable, prepare the wall 100mm beyond the existing sheet to allow sound termination of the Kemperol waterproofing. On a cavity wall remove the existing sheet 100mm below the cavity tray and prepare the surface to allow a sound termination of the Kemperol membrane. Voids greater than 2mm should be filled prior to the application of the system.

Weathered asphalt

Where applicable remove chippings. Any blisters or defects in the asphalt should be cut out and filled to give a sound supporting substrate. Any voids greater than 2mm should be filled prior to the application of the system. All areas should be swept or power washed to remove any contamination that could impair system adhesion.

Concrete/screed

New cement-based surfaces should be fully cured and over 28 days old. Surfaces should be dry, with a moisture content of less than 5%. Surface should be free from friable material, laitance or any contamination to allow suitable adhesion of the waterproofing system. Uneven concrete with peaks or voids greater than 2mm can either be levelled with an approved material or mechanically prepared to give the required finish.

PVC sheet

Use proprietary approved cleaning solutions as required. Once clean and dry, prime the surface in preparation for Kemper V210 waterproofing.

TPO, EPDM sheet

Please refer to Kemperol 2K-PUR or Kemperol 1K-PUR datasheets.

Brickwork, stonework

Fill mortar joints level. Mechanical abrading of the surface is required on engineering bricks or smooth-faced bricks to improve adhesion at perimeter details.

Glazed tiles

Mechanically abrade or grind the surface.

Copper

Mechanical abrading of the surface will enhance adhesion. Use proprietary degreaser or Kemperol MEK universal cleaner to degrease the surface.

Lead

Mechanically abrade the surface to enhance adhesion at perimeter details. Use proprietary degreaser or Kemperol MEK universal cleaner to degrease the surface. Existing lead flashing should be pinned back and secured during application of the Kemperol system.

Exterior grade plywood

During installation allow suitable gaps between boards to allow for expansion/contraction. Install to manufacturer's recommendations. All joints and perimeter edges should be treated with 75mm wide Kemperol 20 Joint Strip during the priming operation (or self-adhesive aluminium tape after priming) to prevent the loss of waterproofing resin between the boards.

Stratex insulation board

All joints should be treated with 75mm wide Kemperol 20 Joint Strip during priming (or self-adhesive aluminium tape after priming). Perimeter edges should also be sealed.

Aluminium, zinc

Mechanical abrading of the surface will enhance adhesion. Use proprietary degreaser or Kemperol MEK universal cleaner to degrease the surface.

New galvanised metal

Pre-treat with Mordant Solution (T-Wash) prior to priming with the Kempertec primer.

Profiled asbestos sheets

Kemperol V210 can be used as a full encapsulation. For partial repairs where difficult access or longer working times are needed, consider the Kemperol 1K-PUR single-pack system.

Priming

Primers are applied by brush or roller to seal the substrate prior to application of the Kemperol V210 resin. The coverage rate for the primer will depend upon the type of primer and the porosity and surface profile of the substrate.

Kemper System have a range of primers for maximising the bond potential to a wide range of substrates under different conditions. Since adhesion is an important aspect to system integrity, please refer to our technical department for advice on a specific situation.

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Waterproofing

For additional technical information and advice, please contact our technical department on 01925 445532 or visit www.kempersystem.co.uk

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 mixed Kemperol V210 resin is applied by roller at a coverage rate of 3.4 kg/m² with Kemperol 200 Fleece or 3 kg/m² with Kemperol 165 Fleece. Coverage will vary slightly depending on the complexity of details.

Two-thirds of the resin is applied first and the 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 50mm (min.) with a minimum 150mm upstand height where possible. Apply waterproofing 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 depending on ambient conditions. If ambient temperatures are below 10°C, add Kemperol Cold Activator to Component B. For temperatures >25°C, add Kemperol Inhibitor to Component B. With increasing temperatures the pot life of the mixed resin is reduced.

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%.

Decorative wearing course

Kemperdur AC and solvent-free TC are hard-wearing surfacings that can be applied over the Kemperol membrane, providing additional protection and allowing colour options to be considered. Other materials can be used for hard landscaping applications, including paving slabs on spacers, paving tiles fully bedded and timber decking on bearers.

Installation

Kemperol waterproofing and surfacing products are only installed by approved, fully trained contractors.

System component	Type	Pack size options
Kemperol V210	Tin	50kg ('A' 23.4kg; 'B' 25kg; 'C' 1.6kg) 20kg ('A' 9.4kg; 'B' 10kg; 'C' 0.6kg)
Kemperol cold activator	Tin	0.5kg; 0.2kg
Kemperol inhibitor	Tin	0.6kg; 0.3kg
Kemperol 165 and 200 fleece	Roll	50m x 105cm 50m x 70cm 50m x 52.5cm 50m x 35cm 50m x 26.25cm
Kempertec D - Primer	Tin	5kg, 2.5kg, 1kg
Kempertec R Primer	Tin	1kg
Kempertec EP5 Primer	Tin	10kg, 3kg
Kempertec EP Primer	Tin	10kg, 3kg
MEK cleaning agent	Tin	9kg, 2kg
Kemperol Talc	Tin	25kg

A full range of tools and accessories is also available.

Every effort has been made to ensure the information provided on this datasheet is correct. It is intended for general guidance only and it is the responsibility of the user to confirm product suitability – more detailed and specific advice may be obtained from our technical department or from an approved contractor.

The correct application of our products is the responsibility of the appointed contractor.

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.