

KGM-200

Water-Based Polyurethane Membrane Technical Data Sheet



Description

KGM-200 is a single component, water-based fibre-reinforced polyurethane membrane which is coated over surfaces to form a seamless watertight finish. KGM-200 cures to produce a solid but flexible material that will provide you with dependable waterproofing protection for both vertical and horizontal surfaces.

Uses

KGM-200 has been formulated for most waterproofing applications requiring long term waterproofing and is designed for both internal and non-exposed external application. It is suited as a general purpose wet area membrane.

Typical Areas of Application

- Internal wet areas and shower recesses
- Podiums, terraces, external balconies & decks
- Sandwich seal between existing and new substrates
- Waterproofing applications requiring high vapour barrier properties

Advantages

- Elastomeric & flexible with good tensile strength properties
- Excellent adhesion to surfaces such as concrete, masonry, renders, cement sheeting, wet area surfaces
- Excellent chemical resistance
- Once cured, will not re-emulsify
- Outstanding low water vapour transmission properties
- Non-hazardous, solvent-free & low VOC
- Meets the criteria of AS:4858-2004 "Wet Area Membranes" as a Class III membrane when applied in accordance with AS:3740-2010
- Formulated for under tile applications
- Compatible with most tile adhesives, screeds & renders

Design Criteria

All works must be carried out as per Australian Standards AS:3740-2010 "Waterproofing of Wet Areas within Residential Buildings", AS:4654.2-2012 "Waterproofing Membrane Systems for Exterior Use" and AS/NZS 4858-2004 "Wet Area Membranes".

Special consideration is needed with every application of waterproofing. For applications not listed above, please contact your nearest KGM supplier for a project specific recommendation.



Physical Properties

Form:	Elastomeric liquid
Colour:	Blue
Specific gravity of mixed product:	1.25kg/litre
Solids Content:	>72%
VOC:	<93ppm
Elongation:	> 380% @ 25°C (Class III)
Tensile strength:	>1.2MPa
Adhesion to concrete (primed):	>1.8MPa
Water vapour transmission:	0.4g/24h/m ²
Shore A hardness:	65
Application temp range:	10 - 30°C
Packaging:	15 litre bucket
Curing:	Re-coat: 2-4 hours @ 23°C Dry film: 8-12 hours @ 23°C Tiling/toppings: 24 hours @ 23°C
Clean-up:	Use water when wet; use solvent cleaners or by mechanical means when dry

Coverage

One 15 litre bucket will cover on average 10m² applying two coats.

Storage

KGM-200 can be stored unopened for 12 months, based on manufacturers batch date, in a cool, dry place below 23°C. Product is sensitive to air, therefore opened containers must be used immediately.

Application Instructions

- 1. Prep work** - surfaces must be made good and should be sound, stable, dry, clean and free from contaminants such as dust, loose flaking material and substances that may diminish adhesion.
- 2. Priming** - exposed surfaces, such as roofs, timber and areas where there is a risk of entrapped moisture, must be primed with KGM-500 primer at no less than 1 litre per 4m². This primer can also be used on wet surfaces or over existing membranes. Particle board and bitumen must be primed with 2 coats of KGM-500. Alternative primers such as KGM-400 may be used in non-exposed areas and where the moisture content of the surface is very low. It is applied at no less than 1 litre per 4m². Excessively porous and dusty surfaces may require an additional priming coat.
- 3. Detailing- Corners:** prime as required. Apply an adequate flexible sealant in accordance with the manufacturer's instruction and tool off to form a solid, coved or 45° fillet extending at least 10mm on to the adjacent surfaces. It is permissible to use either polyurethane, neutral cured silicone or MS polymer as a bond-breaker, but always read the technical data sheets on these sealants before use to confirm their compatibility and curing times.
Joins, Gaps and Cracks: General- they should be suitably filled and sealed with an appropriate elastomeric sealant and allowed to cure. Small cracks should be covered with a flexible sealant or additional coats of membrane.
Large or live cracks - they should be routed out to form a 'V' and then filled and sealed with a waterproof joint sealant as per the manufacturer's instructions. The sealant should be finished slightly proud of the surface and allowed to cure.
Waste Outlets – floor wastes and puddle flanges should be rebated in to allow water to readily drain. Gaps and perimeters should be sealed with a sealant.
Plastic or metal angles - where required by the Building Code such as internal hobs and exterior door barriers should be securely embedded in to a continuous gap free bed of a sealant/mastic.
- 4. Membrane Coating** – stir well. Do not thin product down. Apply KGM-200 liberally to surface area by brush or roller. Apply a minimum of 2 coats. To perform correctly, a total minimum coverage of 1.5L/m² is recommended. KGM-200 can be applied to both vertical or horizontal surfaces using a roller or brush.

Tiling Recommendations

It is permissible to tile, paint or acrylic render directly over KGM-200 with covering materials capable of adhering to water-based membranes. Please contact KGM Australia for further details.

Limitations

- Do not apply when air temperature is below 10°C and above 30°C. Do not allow to freeze.
- Product is not designed for long term UV exposure or foot traffic as it is not a trafficable membrane.
- It should be tiled, topped or painted.
- Do not apply product directly onto damp surfaces.
- Do not thin product in any form.

Safety

Before using or handling materials, please read all relevant Material Safety Data Sheets (MSDS). KGM-200 is user-friendly and safe to use, however avoid contact with skin and eyes. Wear suitable gloves and eye/face protection. Product is non-flammable.

Warranty

The seller warrants that at the time of shipment its products are free from manufacturing defects and, when applied in accordance with the current specification and application instructions, will perform as so stated in its product literature. Project specific warranties are available on request. Please consult your nearest distributor for further information.

Product Disclaimer

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable Australian Standard. Our instructions and recommendations are only for the uses they are intended. KGM Australia does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product. We also reserve the right to update information without prior notice to reflect ongoing research and development programs. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with any relevant items.

Technical Support

For any additional information not expressed in this document, please contact us via the details below.