KeraTrade WPM Plus

Certified, eco-friendly, organic, rapid drying water based polyurethane, Class 3 waterproofing membrane system waterproofing product for substrates in damp environments. Single-component with very low volatile organic compound emissions.

KeraTrade WPM is a one part, highly elastic, Class 3, water-based polyurethane waterproofing membrane system that meets the requirements of AS3740 by complying with AS/NZ 4858 & AS4654.1. As a waterproofing membrane to internal wet area shower, bathroom, kitchen, laundry & toilet areas to AS/NZ 3740. As a waterproofing membrane to external balconies, rooftops & podium levels to AS/NZ 4654.1. As an exposed waterproofing membrane to external applications subjected to light pedestrian traffic only. As a waterproofing membrane for Planter Boxes and retaining walls with root inhibitators. As a waterproofing membrane for swimming pools, covered by tiles.

It is not recommended as a membrane system for negative side hydrostatic pressure

BRANZ Certified Class III membrane **AS/NZS4858 AS4654.1**

GREENBUILDING RATING®

KeraTrade® WPM Plus
- Category: Organic Mineral Products
- Class Waterproofing products for substrates

eco3	Regional Mineral ≥ 30%	Low Emission IAQ VOC Indoor Air Quality	SLV REDUCED Solvent ≤ 5 g/kg	Low Ecological Impact	Health Care
	✓	✓	✓	✓	✓
	Natural mineral content 16%	Very low VOC emissions	Solvent-free	No environmental hazard rating	Non-toxic and non-hazardous

PRODUCT STRENGTHS

- Suitable for bonded screeds and subsequent laying of ceramic tiles, porcelain tiles and natural stone using mineral adhesives
- High elasticity with 300% elongation and chemical stability
- It can be easily applied with a spreader or roller to any substrate
- Root inhibitor for planter boxes

ECO NOTES

- Formulated with locally-sourced minerals meaning lower green-house gas emission during transportation
- Improved on-site safety guaranteed

AREAS OF USE

Use
Waterproofing of smooth, compact and absorbent substrates before laying ceramic coverings with adhesives. Compatible adhesives:
- mineral adhesives and mineral adhesives with SAS technology
- bonded screeds
- single-component and two-component organic mineral adhesives
- cement-based, water-dispersed, reactive-epoxy and polyurethane two-component adhesives

As a waterproofing membrane to internal wet area shower, bathroom, kitchen, laundry & toilet areas to AS/NZ 3740. As a waterproofing membrane to external balconies, rooftops & podium levels to AS/NZ 4654.1. As an exposed waterproofing membrane to external applications subjected to light pedestrian traffic only. As a waterproofing membrane for Planter Boxes and Retaining walls.

Suitable for concrete; cement rendered masonry; FC sheeting; water resistant plasterboard; and structural plywood (Type A Stamped “PAA JAS-ANZ” to AS/NZS2269-2004) substrates.

Do not use
It is not recommended as a membrane system for negative side hydrostatic pressure applications

INSTRUCTIONS FOR USE

SURFACE PREPARATION

- Check that the surface of all substrates to be waterproofed are: structurally sound, clean, dry, or damp with no free surface water, smooth and free of voids & protrusions, free from oils, grease, curing compounds, coatings, adhesive residues and are uncontaminated by preceding trade activities
  Check that all composite substrates, such as wall & floor sheets are fully supported and installed to the manufacturer's instructions New concrete and render must have cured for a minimum 28 days.
- Sand & cement screeds and polymer modified renders must have cured for a minimum 7 days
- Substrates that are not smooth or free of voids and protrusions must be ground and vacuumed clean.
- Primer A must be applied as a primer coat on all applications to porous substrates, e.g. concrete, screeds, renders. Keragrip Primer must be used for non porous substrates such as plastic & metallic substrates, e.g., UPVC drainage outlets and penetrations; aluminium angle water stops, brass, copper and galvanised penetrations, stainless steel drains & gutters etc. Membranes should not be applied until all preparation steps have been completed.

APPLICATION

Moist or Damp Surfaces

- Membrane must be applied to a primed substrate

- KeraTrade WPM is not a vapour barrier is not designed to stop a negative hydrostatic pressure.

Bond Breaker & Membrane Installation

- Internal wet area installation must comply with the minimum requirements of AS/NZ3740

- External wet area installation must comply with the minimum requirements of AS/NZ4654.2, Section 2, "Design and Installation".

- When installing bond breakers use KeraTrade UltraSeal Flex25 or as an alternative Aquastop 120 Tape.

- Bond breaker is to be installed over the dry primer coat where a bond breaker joint is required, e.g. to internal corners and changes in direction of substrate plane, such as wall/floor; wall/wall; hob/wall junctions, pipe penetrations, tap bodies, water stops, drainage outlets or similar

- Bond breaker joints must be a minimum 12mm x 12mm coved bead of sealant applied by caulking gun continuously into all changes of substrate plane, such as, wall/floor, hob/floor, hob/wall and wall/ wall corners to the minimum termination height required by AS/NZ3740 or AS/NZ4654.2 as applicable

- Apply membrane as soon as the bond breaker joint can be over coated respecting the curing time of the bond breaker. If Aquastop120 bandage is used there is no curing time required.

Priming

Porous Substrate

- A porous or absorbent substrate will allow a bead of water to easily soak into, and wet out the surface of the substrate
- Primer A must be applied as a primer coat on all KeraTrade WPM applications to porous substrates

Non-Porous Substrate

- A non-porous or impervious substrate will cause a bead of water to be retained on the surface of the substrate as a raised droplet. The droplet does not easily soak into the surface of the substrate

- Concrete that is overworked or burnished at the time of placement can present, when cured, as a non-porous substrate that will not easily absorb a bead of water. Mechanical abrasion, such as captive shot blasting or vacuumed grinding is required to open substrate pores prior to the application of Keragrip Primer.

- Rigid plastic and metallic substrates require Keragrip primer e.g., uPVC drainage outlets & penetrations, aluminium angle water stops, brass, copper or galvanised penetrations, stainless steel drains & gutters etc.

Application of the Membrane

- Can be applied using a brush, roller or trowel.
- This is a 2-coat system.
- A wet film gauge should be used to regulate adequate membrane coverage during application of each coat.
- A minimum of 1 -2 hours should be allowed between
- The 2nd coat should be applied perpendicular to the 1st coat.
- Do not thin with water or add fillers.
- The regular use of a wet film gauge during application is recommended to ensure correct wet film build per coat.
- The dry film thickness, must be a minimum of 635 microns (0.635mm thickness) per coat or 1.27mm for 2 coats. See the guide below.
- Each 15 Litre pail will cover, depending on wastage and other site conditions: o 12.5m² for 2 coats.

COVERAGE

This will vary with the porosity of the substrates.

Thickness per coat		Total dry film thickness (2 coats)
Wet film	Dry film	
1.06 mm	0.635 mm	1.27 mm

TECHNICAL DATA

Appearance	Grey paste	
Specific weight	≈ 1.3 kg/dm^3	
Chemical nature	co-polymers dispersed in water	
Shelf life	≈ 12 months in the original packaging	
Warning	Protect from frost, avoid direct exposure to sunlight and sources of heat	
Pack	15 L buckets	
Viscosity	≈ 1100000 mPa · s, rotore 93 RPM 0,5	Brookfield method
Temperature range for application	from +5 °C to +35 °C	
Dilution for base coat	NA	
Minimum wet film thickness per coat	≈ 1.06 mm	
Minimum dry thickness per coat	≈ 0.635 mm	
Waiting time between 1st and 2nd coat	≈ 2 hours @ 23° C & 50% RH (minimum of 2 coats)	
Waiting time before laying:		
- min.	≥ 6 hrs @ 23° C & 50% RH (after last coat)	
- max	≤ 48 hrs	
Coverage	≈ 1.2 L/m^2	

Values taken at +23 °C, 50% R.H. and no ventilation.

PERFORMANCE

VOC INDOOR AIR QUALITY (IAQ) - VOLATILE ORGANIC COMPOUND EMISSIONS		
VOC	15g/L	
HIGH-TECH		
Shore "A" Hardness	~70	DIN 1048
Permeability to water vapour μ after 28 days	≥ 20000	Cert.173379 Inst. Giordano
Moisture Vapour	1.2 grams / m2 /24 hours	UNI 8202/22
Adhesion to concrete after 28 days	≥ 2.0 N/mm ^{2}	EN1542
Tensile strength after 28 days:		
- adhesives Class C1	≥ 0,5 N/mm^2	EN1348
- adhesives Class C2	≥ 1 N/mm^2	EN1348
Ultimate elongation after 7 days	≥ 300%	DIN 53 504
Crack bridging	≥ 2 mm	ASTM C 1305
Working temperature	from -40 °C to +90 °C	
Conformity	CSTB	13/12-1142

Values taken at +23 °C, 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site.

WARNING

- **Product for professional use**
- abide by any standards and national regulations
- use at temperatures between +5 °C and +35 °C
- apply the subsequent coat only when the previous one is perfectly dry
- if necessary, ask for the safety data sheet
- This datasheet is for the general help of users. It is provided in good faith. The data is current and accurate to the best of our knowledge. Differing materials, substrates, environments, site conditions, and product storage, handling and application may affect results. Users should carry out tests to decide the product's suitability for purpose. This data sheet and the properties of the product may change without notice. Users, suppliers and retailers should check that the data sheets they have are the latest. To the maximum extent permitted by law, BuildGreen disclaims all warranties in relation to manufacture and use of the product. BuildGreen is not liable for representations made by users, suppliers or retailers about the product. BuildGreen is not liable for any loss or damage resulting from incorrect, careless, or negligent use or storage of the product, including use of out of date product. Any liability arising from use of the product is limited to the replacement or purchase price of the product. BuildGreen does not exclude rights and remedies that cannot be excluded by legislation, for example under the Australian Consumer Law (ACL).