

Keratrade KeraSEAL

high performance epoxy primer / barrier coating

Keratrade KeraSeal is a two-component, water-based epoxy primer and barrier coating known for its versatility in various applications. Its formulation allows it to serve as a primer, moisture barrier and for hydrostatic applications, making it suitable for a wide range of uses in construction and flooring projects.



Uses: **Internal / External**
 Coverage: **60m² as Primer**
 30m² as Moisture Barrier
 2nd coat: **6 hrs**
 Before tiling: **24 hrs after 2nd coat**
 Work time: **90 min @25°C**
 Clean Up: **water**
 App Temp: **10-35°C**
 VOC Rating: **<5g/L**
 (US RULE 1168)
 Size: **20 KIT (2 x 10 L)**

FEATURES

- Effective on damp and green concrete substrates
- Prevents rising damp and efflorescence
- Withstand 250KPA of hydrostatic resistance (25-meter head of water)

SUBSTRATES

- Stone
- Concrete
- Screed
- Masonry
- Concrete Block

COMMON APPLICATIONS

- Can be used as a low water vapour transmission coating and as a moisture barrier over freshly laid or damp concrete.
- Designed to resist hydrostatic pressure, effectively preventing water seepage and dampness from penetrating the interior of walls and floors.
- This product serves as a moisture barrier over freshly laid, hardened (green) concrete. It is applied before adding conventional levelling compounds, carpet, and tile adhesives, ensuring that moisture doesn't interfere with these subsequent applications.
- This coating acts as a Moisture barrier over damp, green, or efflorescence -producing concrete. It is applied before using conventional building coatings to prevent issues related to moisture or efflorescence affecting the final finish.
- This product is used as a primer for Keratrade Liquid Waterproofing Membranes. It prepares the surface to ensure proper adhesion and performance in specific applications.
- When masonry or concrete substrate moisture content is measured at greater than 80% relative humidity, a minimum single coat of Keratrade KeraSeal must be the nominated primer/coating.

SUBSTRATE PREPARATION

Before applying the Keratrade KeraSeal, it's important to prepare the surface thoroughly. Start by using mechanical methods and vacuum cleaning to remove all dirt, dust, curing compounds, oils, grease, surface sealers, and other contaminants. Ensure the surface is sound, clean, and free from sharp edges or loose materials that could damage the coating, membrane, or levelling compound.

For substrates such as blockwork, brickwork, and concrete that have surface imperfections like divots or minor irregularities, repairs must be carried out before applying the Keratrade KeraSeal. Kerakoll Geolite range or Kerakoll KeraLevel LR must be used to carry out repairs to the affected areas. This preparation step is essential to ensure a uniform and smooth substrate, which is critical for the successful and effective application of the Keratrade KeraSeal. Correct substrate repairs help in achieving optimal adhesion and performance of the coating system.

MIXING

Each component of the Keratrade KeraSeal must be mixed separately until homogeneous. Use a different mixing paddle for each component to prevent cross-contamination. Once individually mixed, combine the Part A+B in a 1:1 volume ratio and thoroughly mix until a uniform blend is achieved. Be sure to mix only the amount that can be used within the product's pot life and take care to avoid excessive aeration during the mixing process.

APPLICATION METHOD

When applying the product to dry or highly porous surfaces, it's important to first spray the surface with a fine mist of water. Ensure that any free-standing water is removed before beginning the application. This step helps enhance adhesion and ensures an even application of the product. For floor applications, spread the material using a squeegee or stiff nylon broom to effectively work it into the prepared surface. Once spread, use a medium to long nap roller to finish the application, ensuring the required coverage is achieved. This method helps to evenly distribute the product and ensure thorough adhesion. For wall applications, use a roller to apply the product, ensuring it is thoroughly worked into the prepared surface. Make sure to achieve the required coverage for optimal performance and adhesion. This technique ensures an even and effective coating. Keratrade KeraSeal can be sprayed, with the addition of 10% water during the first coat will assist surface penetration.

- A one-coat application is used as a primer when preparing the surface for subsequent Keratrade Liquid Membranes and cement based adhesives and levellers. This single layer helps ensure proper adhesion and prepares the substrate for overcoating with Keratrade or Kerakoll materials.
- A two-coat application is employed for creating a moisture barrier, addressing issues like efflorescence and rising damp, or for negative side applications dealing with hydrostatic pressure. This approach ensures enhanced protection and effectiveness in preventing moisture penetration.

Extended working time beyond 48 hours

For any requirements requiring a key for the application of other materials extending beyond 48 hours then sand seeding is required such as large scale levelling. If the KeraSeal is only used as a Primer then the key can be created in the second coat of the KeraSeal. To establish a key the second coat of KeraSeal must be applied with broadcasting of Kiln dried, sand (0.5mm diameter) over the surface at 800g/m² to achieve at least 90% coverage. Allow a minimum of 24 hours curing, then sweep and vacuum any excess sand from the surface before tiling or levelling. If KeraSeal is used as both a Primer and Moisture barrier, a third coat of the KeraSeal must be applied with broadcasting of Kiln dried, sand (0.5mm diameter) over the surface at 800g/m² to achieve at least 90% coverage. Allow a minimum of 24 hours curing, then sweep and vacuum any excess sand from the surface before tiling or levelling. Note that curing times may vary based on substrate temperature.

TILING APPLICATION

Substrates such as screeds should be normally allowed to dry for 7 days prior to the fixing of ceramic or porcelain tiles or alternatively engineered screeds to allow for application of tiles after 24 hours. Alternatively, two coats of KeraSeal can be applied at 3.0m²/L per coat to provide a moisture barrier for the acceptance of tiles sooner than the 7 days for normal screeds.

Where ceramic tiles are to be installed and moisture barrier is required, the third coat must be sand seeded. Whilst the third coat is wet, Kiln dried sand of 0.5mm diameter shall be broadcast over the surface at a rate of 800g/m² to achieve at least 90% coverage. After 24 hours minimum cure, the excess sand shall be swept and vacuumed from the surface prior to tiling application. Curing times will vary depending on substrate temperatures and ambient air conditions.

GUARANTEE

BuildGreen guarantees that Keratrade Products are free from manufacturing defects and will meet any applicable specifications published by us for a period of 10 years from the date of purchase. Refer to the BuildGreen Guarantee.

DISCLAIMER

The technical details and recommendations are provided based on the best knowledge at the time. It is the user's responsibility to ensure the correct use and handling of the products in line with applicable Australian Standards. Users should verify that the product is appropriate for their specific applications and meets system specifications. We reserve the right to change information without prior notice as part of ongoing research and development.

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FLOORING APPLICATION

Keratrade Keraseal serves as an effective moisture barrier for damp concrete subfloors, making it an essential product to use before installing floor coverings or waterproof membranes. This helps prevent moisture-related issues that can affect the integrity of the flooring and ensures a more durable and reliable installation. To apply Keratrade Keraseal effectively, you will need two coats, each covering 3.0 m² per litre.

When preparing for leveling cements requiring Primer properties of Keraseal or extending the life of overcoating of levelling, it's important to sand seed the second coat. While the second coat is still wet, broadcast Kiln dried, sand (0.5mm diameter) over the surface at 800g/m² to achieve at least 90% coverage. Allow a minimum of 24 hours curing, then sweep and vacuum any excess sand from the surface before tiling. Note that curing times may vary based on substrate temperatures and ambient conditions.

When preparing for leveling cements requiring the Moisture barrier properties of Keraseal or extending the life of overcoating of levelling, it's important to sand seed a third coat. While the third coat is still wet, broadcast Kiln dried, sand (0.5mm diameter) over the surface at 800g/m² to achieve at least 90% coverage. Allow a minimum of 24 hours curing, then sweep and vacuum any excess sand from the surface before tiling. Note that curing times may vary based on substrate temperatures and ambient conditions.

CURING

After applying the final coat of Keratrade Keraseal, it is crucial to allow it to cure for a minimum of 24 hours before proceeding with the application of water-based membranes, mortars, levelling compounds, decorative coatings, or other surface treatments. During this period, it's important to handle the area with care to avoid damaging the coating. Be aware that curing times can vary based on factors such as substrate moisture content, substrate temperatures, and ambient air conditions.

PRODUCT THINNING

For the application of Keratrade Keraseal, the first coat can be thinned with water to enhance penetration, depending on the porosity of the surfaces being coated. You can thin it by up to 5% for dense surfaces and up to 20% for more porous surfaces. However, it is important to avoid thinning the second coat, as this may make it more challenging to achieve the required dry film thickness. If necessary, a third coat can be applied to ensure adequate coverage and performance.

COVERAGE

Keratrade Keraseal provides a coverage of 3.0 m² per liter per coat when applied undiluted. The recommended wet film thickness results in a nominal dry film thickness of 150 microns per coat, or 300 microns for two coats applied to the surface. It's important to note that the apparent dry film thickness may vary depending on the porosity of the substrate. However, any product absorbed by the substrate continues to contribute to the moisture barrier function, ensuring effective performance even if the visible thickness is reduced.

CLEANING

Wash all equipment in water or water/detergent immediately on completion.

SHELF LIFE

Keratrade Keraseal has a shelf life of 24 months when stored in the original, unopened packaging in a dry place at 23°C and 50% RH

LIMITATIONS

Tiling can begin 24 hours after curing Keratrade Keraseal but should not exceed a maximum of five days. It is essential for the installer to ensure there is no surface contamination during this period. For external tiling jobs, sand blinding the wet Keratrade Keraseal surface with kiln-dried sand is recommended to avoid timing issues. The product should be applied when surface and ambient temperatures are between 10°C and 35°C, as it will not cure effectively below 10°C. Additionally, curing times can be negatively impacted when relative humidity exceeds 85%. In enclosed areas, proper ventilation is necessary during the curing cycle to facilitate adequate evaporation of water. Note that Keratrade Keraseal is not classified as a trafficable coating.

SAFETY DATA

Keratrade Keraseal may cause skin irritation and allergic reactions, as well as serious eye injuries and irritation to the respiratory system. It is also toxic to aquatic life with long-lasting effects. In case of eye contact, rinse with running water for at least 15 minutes and seek advice from a doctor. It's essential to wear protective gloves, clothing, and eye and face protection, and to avoid inhaling dust, fumes, gases, mists, vapours, or sprays. Ensure adequate ventilation during mixing and application. Store the product securely, and check with your local council regarding the disposal of contents. Dispose of packaging thoughtfully and recycle where possible. Keep out of reach of children. For more information, refer to the Safety Data Sheet (SDS) available at www.buildgreen.au.

TECHNICAL DATA

CHARACTERISTICS	NOMINAL VALUE
COLOUR	Grey
FINISH	Semi gloss
VOLUME SOLIDS	56% (approx)
MIXING VOLUMES	1:1 PART A & B
COVERAGE	Must be applied at a rate of 1.5m ² /L in total (equivalent to two coats at 3m ² /L percoat) to achieve an effective moisture barrier
WET FILM THICKNESS	300 micrometers (0.3mm) per coat
MIXED SG	1.3kg/L
MIXED VISCOSITY	12,000 - 20,000 cps
RECOTE TIME	4 hours @ 25°C @ 50% RH
FULL CURE	7 Days @ 25°C @ 50% RH
POT LIFE	2 hours at @ 25°C 1 hour at @ 25°C
VOC CONTENT	26g/L
MOISTURE VAPOUR TRANSMISSION (@0.3mm DFT)	<10g/m ² /24hrs

Total finished dry film thickness (2 coats)	
Floors	300 Um
Walls	300 Um

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