

Biogel® No Limits®

Exclusive Kerakoll geo-binder based, structural flexible multi-purpose gel adhesive for bonding all types of material, on all substrates, and for all use, even in extreme conditions. Eco-friendly.



GREENBUILDING RATING®

Biogel® No Limits®
 - Category: Inorganic mineral products
 - Laying ceramic, porcelain tiles and natural stone

rating 4 White	Recycled mineral content White 32%	CO ₂ /kg emission White 246%	Very low VOC emissions	Can be recycled as inert material
rating 3 Grey				

RATING SYSTEM ACCREDITED BY CERTIFICATION BODY SGS

PRODUCT STRENGTHS

- Thixotropic and fluid
- Full wettability
- High deformation
- Specifically intended for laying large slabs

ECO NOTES

- Formulated with locally-sourced minerals meaning lower greenhouse gas emission during transportation
- Contains recycled minerals thereby reducing the damage to the environment caused by extracting pure raw materials
- Single-component; avoiding the use of plastic cans reduces CO₂ emissions and the need to dispose of special waste

AREAS OF USE

Use

Substrates No Limits:

- Existing tiles	- Plasterboard	- Thermal insulation panelling systems
- Waterproofing products	- Fibro-cement slabs	- Insulating panels
- Heating systems	- Gypsum and anhydrite	- Impact noise insulation sheets
- Cement-based screeds	- Cellular concrete	- Timber
- Asphalt screeds	- Brick	- Metal
- Concrete	- Lime and cement-based plasters/renders	- PVC

Materials No Limits:

- Porcelain tiles	- Large ceramic slabs	- Glass tiles
- Laminated stoneware	- Marble - natural stone	- Thermal and acoustic insulation
- Low thickness slabs	- Recomposed materials	- Terracotta - klinker
- Ceramic tiles	- Glass mosaics	

Uses No Limits:

- Adhesive and finishing	- Terraces and balconies	- Domestic
- Floors and walls	- Façades	- Commercial
- For internal use - external	- Swimming pools and fountains	- Industrial
- Overlaying	- Saunas and spa	- Street furniture

* ÉMISSION DANS L'AIR INTÉRIEUR Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).

INSTRUCTIONS FOR USE

Preparation of the substrate

All substrates must be level, cured, undamaged, compact, rigid, resistant, dry and free from any debonding agents and from damp rising. It is good practice to dampen highly absorbent concrete substrates or apply a coat of Primer A Eco.

Preparation

The substrate must comply with current technical regulations and national standards.

Mixing water (EN 12004-2):

-Grey:

Normal consistency (EN 12004-2 § 6)
≈ 30% – 32% weight (≈ 7.5 – 8 ℓ / 1 bag)

Fluid consistency
≈ 36% – 38% weight (≈ 9 – 9.5 ℓ / 1 bag)

-Shock White

Normal consistency (EN 12004-2 § 6)
≈ 25% – 27% weight (≈ 6.25 – 6.75 ℓ / 1 bag)

Fluid consistency
≈ 31% – 33% weight (≈ 7.75 – 8.25 ℓ / 1 bag)

Mix Biogel® No Limits® using clean water until a smooth and lump-free mixture is obtained; leave the mixture to stand for a few minutes and mix again.

Comply with the amounts of water indicated, according to the application to be carried out

Application

To guarantee structural adhesion it is necessary to apply a layer of adhesive sufficient to cover the entire back of the coating material. Large, rectangular sizes with sides > 60 cm and low thickness sheets may require adhesive to be applied directly to the back of the material.

Check samples to make sure the adhesive has been transferred to the back of the material.

Create elastic expansion joints:

- ≈ 10 m² in external applications,
- ≈ 25 m² in internal applications,
- every 8 metres in long, narrow applications.

Respect all structural, fractionizing and perimeter joints present in the substrates.

SPECIAL NOTES

Pre-treatment of special substrates

Timber (internal use only) thickness ≥ 25 mm: Keragrip Eco

Metal (internal use only): Keragrip Eco

Asphalt screed (internal use only): Primer A Eco

Gypsum and anhydrite (internal use only): Primer A Eco

PVC (internal use only): Keragrip Eco

As treating special substrates is difficult to classify in a standard manner, it is always advisable to contact Kerakoll Global Service and/or request a site inspection by a GreenBuilding Consultant. In any case it is essential to carefully read the technical data sheet on how to use the indicated primers properly.

Materials and special substrates

Marble–natural stones and Recomposed materials: materials that are subject to deformation or staining due to water absorption require a quick-setting or reactive adhesive. Marble and natural stone in general may have characteristics that vary even with reference to materials of the same chemical and physical nature. For this reason it is essential you consult Kerakoll Global Service to request specific indications or to carry out a test on a sample of the material. In the absence of specific indications from the manufacturer, natural stone slabs with reinforcement layers, in the form of resin coating, polymer mesh, matting, etc. or treatments (for example damp courses, etc.) applied on the laying surface must be tested in advance to ensure they are compatible with the adhesive. Check for the presence of any really consistent traces of rock dust created during cutting, and remove them if found.

Waterproofing products: adherent and floating polymer sheets, liquid bitumen and tar-based sheets or membranes require application of a laying screed on top.

Special applications

Façades: the substrate should guarantee a cohesive tensile strength of ≥ 1.0 N/mm².

The need to call for suitable mechanical safety anchoring must be evaluated by the designer for coverings with > 30 cm side.

For coverings with > 60 cm, add to the mixing water a percentage of Top Latex Eco to assess the function of the thermo-dynamic strain provided by the structure.

Always apply a layer of adhesive directly on the back of the material.

TECHNICAL DATA COMPLIANT WITH KERAKOLL QUALITY STANDARD

Shelf life	≈ 12 months in the original packaging in dry environment. Protect from humidity	
Pack	25 kg	
Adhesive thickness	from 2 to 15 mm	
Temperature of the air, substrates and materials	from +5 °C to +35 °C	
Pot life at +23 °C:		
- Grey	= 4 hrs	
- White Shock	= 4 hrs	
Open time at +23 °C:		
- Grey	= 30 min.	EN 12004-2
- White Shock	= 30 min.	EN 12004-2
Time required until fully frost-proof:		
- from +5 °C to -5 °C	≈ 8 hrs	
Foot traffic/grouting of joints at +23 °C:		
- Grey	≈ 24 hrs	
- White Shock	≈ 24 hrs	
Grouting in walls at +23 °C:		
- Grey	≈ 12 hrs	
- White Shock	≈ 12 hrs	
Ready for use at +23 °C / +5 °C:		
- light foot traffic	≈ 2 – 3 days	
- heavy traffic	≈ 3 – 7 days	
- swimming pools (+23 °C)	≈ 14 days	
Coverage per mm thickness:		
- Grey (mixing ratio 32%)	≈ 1.25 kg/m ²	
- White Shock (mixing ratio 33%)	≈ 1.25 kg/m ²	

Values taken at +23 °C, 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site, i.e. temperature, ventilation and absorbency level of the substrate and of the materials laid.

PERFORMANCE

VOC INDOOR AIR QUALITY (IAQ) - VOLATILE ORGANIC COMPOUND EMISSIONS

Conformity EC 1 plus GEV-Emicode Cert. GEV 7582/11.01.02

HIGH-TECH

Shear adhesion (porcelain tiles/porcelain tiles) after 28 days ≥ 2,5 N/mm² ANSI A-118.4

Tensile adhesion (concrete/porcelain tiles) after 28 days ≥ 2,5 N/mm² EN 12004-2

Durability test:

- adhesion after heat ageing ≥ 1 N/mm² EN 12004-2

- adhesion after water immersion ≥ 1 N/mm² EN 12004-2

- adhesion after freeze-thaw cycles ≥ 1 N/mm² EN 12004-2

- adhesion after straining cycles ≥ 1 N/mm² SAS Technology

Vertical slip ≤ 0,5 mm EN 12004-2

Transversal deformation ≥ 2,5 mm EN 12004-2

Working temperature from -40 °C to +90 °C

Conformity: C2TES1 EN 12004

C2 E S1 / C2 EG S1 CSTB 3123-213 MC 259

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
- do not use the adhesive to correct substrate irregularities greater than 15 mm
- protect from direct rainfall for at least 24 hrs
- the temperature, ventilation and absorption of the substrate and covering materials, may vary the adhesive workability and setting times
- use the right size of toothed spreader for the format of the tile or slab
- guarantee a full-bed in all external laying operations
- if necessary, ask for the safety data sheet
- for any other issues, contact the Kerakoll Worldwide Global Service +39 0536 811 516 - globalservice@kerakoll.com

The Rating classifications refer to the GreenBuilding Rating® Manual 2013. This information was last updated in October 2021 (ref. GBR Data Report - 11.21); please note that additions and/or amendments may be made over time by KERAKOLL SpA; for the latest version, see www.kerakoll.com. KERAKOLL SpA shall therefore be liable for the validity, accuracy and updating of information provided only when taken directly from its institutional website. The technical data sheet given here is based on our technical and practical knowledge. As it is not possible for us to directly check the conditions in your building yards and the execution of the work, this information represents general indications that do not bind Kerakoll in any way. Therefore, it is advisable to perform a preliminary test to verify the suitability of the product for your purposes.



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