

Biogel Extreme

Highly deformable and workable, hybrid gel adhesive, bonds everything and is tested under the most extreme working conditions.



Rating 2

1. Very fast bonding, adhesive strength 5 times superior to a class C2 (4.5 N/mm²) cement-based adhesive after 24 hrs
2. Stress resistant 10 times more deformable than a class S2 (> 50 mm) cement-based adhesive
3. Easy to spread, 5 times less viscous than a (35 Pa*s) polyurethane adhesive, it turns into a fluid gel like a cement-based adhesive

- × VOC Low Emission
- × Water Based
- ✓ Solvent ≤ 5 g/kg
- × Low Ecological Impact
- ✓ Health Care

Areas of application

→ Use

Substrates Extreme:

- Existing tiles
- Heated floors
- Cement-based screeds and self-levelling products
- Concrete
- Plasterboard
- Fibro-cement slabs
- Gypsum and anhydrite ⁽¹⁾
- Cellular concrete
- Brick
- Lime and cement-based plasters/renders
- Thermal insulation panelling systems
- Impact noise insulation sheets
- Cracked screeds
- Uncured damp screeds
- Wood – metal – sheet metal ⁽²⁾
- Rubber floors – pvc ⁽²⁾
- High-thickness coatings in epoxy and polyurethane resin

⁽¹⁾ apply 1 coat of EP21 as a dust consolidator. Internal use only.

⁽²⁾ clean with Keragrip Eco Pulep.

Materials Extreme:

- Porcelain tiles
- Laminated stoneware
- Porcelain tile with resin back
- Very large formats
- Low thickness slabs
- Ceramic tiles
- Marble - natural stone
- Marble with resin back

- Recomposed materials
- Cement-based recomposed materials
- Glass mosaics
- Glass tiles
- Thermal and acoustic insulation (with the exclusion of polystyrene and styrofoam or any other material that can be attacked by plasticizers)
- Terracotta - Klinker
- Metal tiles

Uses Extreme:

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

Do not use:

- in direct contact with polystyrene (Styrofoam, EPS, XPS, etc...)
- on Aquastop Nanoflex
- on cement-polymer waterproofing sheathings, check the suitability on the producer's technical data sheets
- on substrates that are not fully dry and subject to moisture rising.

Instructions for use

→ Preparation of the substrate

All the substrates must be flat, compact, resistant, free from dust, loose particles and debonding agents and not be subject to moisture rising.

→ Preparation

Single Pack: Part B is found inside the pack.

Respect the preset ratio of 8.6 : 1.4.

Remix part B into the bucket containing part A, being careful to mix the two parts uniformly until a smooth, even coloured mixture is obtained.

The containers of Biogel Extreme must be stored at a temperature of $\approx +20$ °C for at least 2 – 3 days prior to use.

→ Application

Biogel Extreme can be applied with a suitable toothed spreader, to be chosen according to the

size and type of the tile. Using the smooth part of the trowel, apply a fine layer of product, pressing down onto the substrate in order to ensure maximum adhesion. Press down each tile into the ribbed adhesive to allow for maximum coverage of the surface.

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.

Respect structural, fractionizing, and perimeter joints present in the substrates. Abide by local existing provisions when creating elastic expansion joints.

Instructions for use

→ Cleaning

Clean the tools and any residues of Biogel Extreme from the coated surfaces using water

while the adhesive is still fresh. Once hardened, the adhesive can only be removed mechanically or using Fuga-Shock Eco cleaner.

Special notes

→ Materials and special substrates

- Marble–natural stones and Recomposed materials: check for the presence of any really consistent traces of rock dust created during cutting, and remove them if found.
- Special substrates: adherent and floating polymer sheets, liquid bitumen and tar-based sheets or membranes require application of a laying screed on top.
- Biogel Extreme is suitable for laying on floors on screedless underfloor heating systems composed of panels with a core in pre-shaped insulating material coupled on the surface with a heat-conducting aluminium sheet. Biogel Extreme will be applied directly on the aluminium sheet without the use of primer after cleaning the aluminium itself from dust or debonding agents.

→ Special applications

- Facades: the substrate should guarantee a cohesive tensile strength of $\geq 1.0 \text{ N/mm}^2$. The need to call for suitable mechanical safety anchoring must be evaluated by the designer for coverings with $> 30 \text{ cm}$ side. Always apply a layer of adhesive directly on the back of the material.
- Swimming pools and fibreglass panels: sand the surface in order to obtain a good surface roughness and then clean with Keragrip Eco Pulep before applying the adhesive.
- In insulation panelling systems, carry out a reinforced plaster/render cycle, mechanically fixed to the substrate, with a minimum thickness of 10 mm.

Certificates and marks



* 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).

| Technical Data compliant with Kerakoll Quality Standard | | |
|--|--|-----------------|
| Appearance | Part A white paste / Part B white paste | |
| Mixing ratio | Part A : Part B = 8.6 : 1.4 | |
| Pack | monopack 10 kg (8.6 +1.4 kg) | |
| Shelf life | ≈ 24 months from production in the original sealed packaging | |
| Warning | Protect from frost | |
| Thickness | from 2 to 15 mm | |
| Temperature range for application | from +5 °C to +35 °C | UNI 11493 - 8.3 |
| Pot life: | | |
| - +23 °C | ≈ 110 min. | |
| - +35 °C | ≈ 80 min. | |
| Open time (BIII tile): | | |
| - +23 °C | ≈ 180 min. | |
| - +35 °C | ≈ 90 min. | |
| Correction time (BIII tile): | | |
| - +23 °C | ≥ 120 min. | |
| - +35 °C | ≥ 60 min. | |
| Foot traffic/grouting of joints (BIa tile): | | |
| - +23 °C | ≈ 4 hrs | |
| - +5 °C | ≈ 15 hrs | |
| Ready for use at +23 °C / +5 °C (BIa tile) | | |
| - light foot traffic | ≈ 6 – 20 hrs | |
| - heavy traffic * | ≈ 12 – 24 hrs | |
| - swimming pools (+23 °C) | ≈ 3 days | |
| Coverage per mm of thickness | ≈ 1.45 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.

* see section Special notes to reduce timing.

Performance**HIGH-TECH**

| | | |
|--|---------------------------|------------|
| Shear adhesion after 7 days | $\geq 7.5 \text{ N/mm}^2$ | EN 12004-2 |
| Shear adhesion after water immersion | $\geq 5 \text{ N/mm}^2$ | EN 12004-2 |
| Shear adhesion after thermal shock | $\geq 5.5 \text{ N/mm}^2$ | EN 12004-2 |
| Shear adhesion after immersion in chlorine water | $\geq 3 \text{ N/mm}^2$ | EN 12004-2 |

Adhesion test method according to EN 12004

Tensile adhesion (concrete/porcelain tile):

| | | |
|-----------------|---------------------------|------------|
| - after 6 hrs | $\geq 2.4 \text{ N/mm}^2$ | EN 12004-2 |
| - after 28 days | $\geq 4.5 \text{ N/mm}^2$ | EN 12004-2 |

Durability test:

| | | |
|-------------------------------------|---------------------------|----------------|
| - adhesion after heat ageing | $\geq 4 \text{ N/mm}^2$ | EN 12004-2 |
| - adhesion after water immersion | $\geq 2.5 \text{ N/mm}^2$ | EN 12004-2 |
| - adhesion after freeze-thaw cycles | $\geq 2 \text{ N/mm}^2$ | EN 12004-2 |
| - adhesion after straining cycles | $\geq 2 \text{ N/mm}^2$ | SAS Technology |

| | | |
|-------------------------|----------------------|------------|
| Transversal deformation | $\geq 50 \text{ mm}$ | EN 12004-2 |
|-------------------------|----------------------|------------|

| | |
|---------------------|---|
| Working temperature | from $-40 \text{ }^\circ\text{C}$ to $+90 \text{ }^\circ\text{C}$ |
|---------------------|---|

| | | |
|------------|-----|----------|
| Conformity | R 2 | EN 12004 |
|------------|-----|----------|

Values taken at $+23 \text{ }^\circ\text{C}$, 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 against direct rain for at least 12 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 notched trowel for the format of the tile or slab
- for laying on cement-polymer waterproofing coverings, check the suitability on the producer's technical data sheet
- do not use in direct contact with polystyrene (Styrofoam, EPS, XPS, etc...), always carry out a cement finishing of not less than 10 mm beforehand
- 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 March 2022 (ref. GBR Data Report - 03.22); please note that additions and/or amendments to this information 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.