

# Bioflex

Mineral adhesive for high performance bonding of porcelain tiles, ceramic tiles and natural stone, with no vertical slip and long open time.



1. With very low-VOC
2. With organic salts
3. With extra-pure inert minerals

## Rating 2



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- × × Regional Mineral  $\geq 60\%$
- × × Recycled Regional Mineral  $\geq 30\%$
- × × CO<sub>2</sub> Emission  $\leq 250$  g/kg
- ✓ ✓ VOC Low Emission
- ✓ ✓ Recyclable

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## Areas of application

### → Use

#### Substrates:

- existing tiles
- waterproofing products
- heated floors
- cement-based screeds
- asphalt screeds <sup>(1)</sup>
- concrete
- plasterboard
- fibro-cement slabs
- gypsum and anhydrite <sup>(1)</sup>
- cellular concrete
- smooth prefabricated concrete <sup>(1)</sup>
- brick
- lime and cement-based plasters/renders
- thermal insulation panelling systems
- insulating panels
- timber <sup>(1)</sup>
- metal <sup>(1)</sup>
- PVC <sup>(1)</sup>

(1) After application of Active Prime Fix or Active Prime Grip

### Materials:

- ceramic tiles
- porcelain tiles
- large formats
- terracotta
- klinker
- marble and natural stone
- various mosaics
- internal insulating and soundproofing panels

### Uses:

- adhesive and finishing
- floors and walls
- for internal use - external
- overlaying
- terraces and balconies
- swimming pools and fountains
- saunas and spa
- domestic
- commercial
- street furniture
- marine

### Do not use:

- on organic-based, reactive waterproofing products (such as RM according to EN 1489).

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## 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 best to dampen highly absorbent cement-based substrates before the application or apply one coat of Active Prime Fix or Active Prime Grip.

### → Adhesive preparation

#### Mixing water (EN 12004-2):

- Grey ≈ 28.5% by weight
- White ≈ 28% by weight

#### Mixing water on-site:

- Grey ≈ 6,5 – 7,5 l / 1 x 25 kg bag
- White ≈ 6,5 – 7,5 l / 1 x 25 kg bag

The amount of water indicated on the packaging is indicative. It is possible to obtain mixtures with consistency of variable thixotropy according to the application to be made.

### → Application

To guarantee structural adhesion it is necessary to apply a layer of adhesive sufficient to cover the entire back of the 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.

### → Cleaning

Clean the tools and any residues of the product from the surfaces using water while the adhesive is still fresh. Once hardened, the adhesive can only be removed by mechanical means.

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## Special notes

→ **Materials and special substrates**

Marble and Natural Stone that is subject to deformation or staining due to water absorption requires to carry out a test on a sample of the material. 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**

- Insulating and soundproofing panels for interior use applied as recommended by the manufacturers.  
- Plasterboard and fibro-cement slabs must be firmly anchored to specific metal frames.

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## Certificates and marks



<b>Technical Data compliant with Kerakoll Quality Standard</b>		
Appearance	white or grey pre-mixed powder	
Pack	25 kg bags	
Shelf life	≈ 12 months from production in the original sealed packaging, protect from humidity	
Thickness	from 2 to 15 mm	
Temperature range for application	from +5 °C to +40 °C	
Pot life at +23 °C	≈ 8 hrs	
Open time at +23 °C (BIII tile)	≥ 30 min.	EN 12004-2
Correction time at +23 °C (BIII tile)	≥ 30 min.	
Time required until fully frost-proof		
- from +5 °C to -5 °C	≈ 8 hrs	
Grouting of joints at +23 °C:		
- on walls	≈ 4 - 8 hrs	
- on floor	≈ 20 hrs	
Ready for use at +23 °C:		
- foot traffic	≈ 24 hrs	
- heavy traffic	≈ 3 - 4 days	
- swimming-pools	≈ 14 days	
Coverage per mm of thickness	≈ 1.2 kg/m <sup>2</sup>	

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.

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**Performance**


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**VOC Indoor Air Quality (IAQ) - Volatile organic compound emissions**


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Conformity	EC 1 plus GEV-Emicode	GEV certified 4616/11.01.02
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**HIGH-TECH**


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Shear adhesion (porcelain tiles/ porcelain tiles) after 28 days	$\geq 1 \text{ N/mm}^2$	ANSI A-118.4
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Tensile adhesion (concrete/porcelain tiles) after 28 days	$\geq 2 \text{ N/mm}^2$	EN 12004-2
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**Durability test:**


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- adhesion after heat ageing	$\geq 1 \text{ N/mm}^2$	EN 12004-2
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- adhesion after water immersion	$\geq 1 \text{ N/mm}^2$	EN 12004-2
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- adhesion after freeze-thaw cycles	$\geq 1 \text{ N/mm}^2$	EN 12004-2
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Working temperature	from $-30 \text{ }^\circ\text{C}$ to $+80 \text{ }^\circ\text{C}$	
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Conformity	C2 TE	EN 12004
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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.

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## 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 notched trowel 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 - [info@kerakoll.ae](mailto:info@kerakoll.ae)

The Rating classifications refer to the GreenBuilding Rating Manual 2013. This information was last updated in July 2024 (ref. GBR Data Report – 07.24); please note that additions and/or amendments may be made over time by KERAKOLL SpA; for the latest version, see [www.kerakoll.com](http://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 site 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.