

Bioflex®

Flexible mineral adhesive to fix vitrified tiles and natural stones on floor and wall.



GREENBUILDING RATING®

Bioflex®
 - Category: Inorganic mineral products
 - Mineral adhesives with SAS technology

Rating 2

RATING SYSTEM ACCREDITED BY CERTIFICATION BODY SGS

PRODUCT STRENGTHS

- Highly polymer-modified
- Thicknesses up to 15 mm
- For internal and external use
- For balconies and terraces
- No sag
- Prolonged workability
- Adjustable
- Sustains heat ageing
- For fixing stones

ECO NOTES

- Single-component; avoiding the use of plastic cans reduces CO₂ emissions and the need to dispose of special waste
- Can be recycled as mineral inert material, avoiding waste disposal costs and environmental impact
- With very low volatile organic compound emissions

AREAS OF USE

Use

Surfaces:

- Cement-based screeds and mortars
- Cement and gypsum-based plasters/renders
- Cellular concrete, for internal use
- Plasterboard
- Heated floors
- Waterproofing products
- To overlay existing floors
- Lime and cement-based plasters/renders
- Fibro-cement slabs
- Concrete surfaces

Materials:

- Ceramic tiles
- Vitrified tiles
- Terracotta
- Marble and natural stone
- Indian marble
- Various mosaics
- Internal insulating and soundproofing panels

Uses:

- Adhesive and finishing
- Floors and walls
- Internal use – external use
- Overlaying
- Terraces and balconies
- Swimming pools and fountains
- Saunas and spa
- Domestic applications
- Commercial applications
- 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 surface

All surfaces must be dimensionally stable according to IS 1443-1972, 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 surfaces or apply a coat of Primer A Eco.

Adhesive preparation

Mixing water:

- Grey ≈ 8.9 litres of clean water per bag
- White ≈ 8.9 litres of clean water per bag

Application

To guarantee maximum adhesion it is necessary to apply a sufficient layer of adhesive.

Large, rectangular sizes with sides > 60 cm may require adhesive to be applied directly to the back of the tile surface.

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 surfaces.

SPECIAL NOTES

Pre-treatment of special surfaces

Gypsum-based plasters/renders: Primer A Eco. Please see the technical data sheet on how to use the Primer properly.

Materials and special surfaces

Marble, Natural Stones and Recomposed Materials that are subject to deformation or staining due to water absorption require a reactive adhesive. Marble, natural stones and recomposed materials 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 India Helpline 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 fixing 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.

Special applications

Insulating and soundproofing panels for interior use applied using spot adhesion as recommended by the manufacturers.

Plasterboard and fibro-cement slabs must be firmly anchored to specific metal frames.

Do not use

- On wood, metal, plastics, resilient materials, deformable surfaces.
- On screeds, plasters/renders, not yet cured concrete.
- On surfaces subject to vibrations.
- On plasterboard and fibre-cement slabs.
- On smooth prefabricated concrete.

TECHNICAL DATA COMPLIANT WITH KERAKOLL QUALITY STANDARD

Shelf life	≈ 12 months in the original packaging	
	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	≈ 6 hrs	
- White	≈ 5 hrs	
Pot life at +35 °C		
- Grey	≈ 5 hrs	
- White	≈ 4 hrs	
Open time at +23 °C (BIII tile):		
- Grey	≥ 60 min.	EN 14411
- White	≥ 60 min.	EN 14411
Open time at +35 °C (BIII tile):		
- Grey	≥ 20 min.	EN 14411
- White	≥ 20 min.	EN 14411
Correction time at +23 °C (BIII tile)		
- Grey	≥ 15 min.	EN 14411
- White	≥ 15 min.	EN 14411
Foot traffic/grouting of joints at +23 °C (BIIa tile):		
- Grey	≈ 20 hrs	EN 14411
- White	≈ 20 hrs	EN 14411
Foot traffic/grouting of joints at +35 °C (BIIa tile):		
- Grey	≈ 12 hrs	EN 14411
- White	≈ 12 hrs	EN 14411
Grouting in walls at +23 °C (BIIa tile)		
- Grey	≈ 20 hrs	EN 14411
- White	≈ 20 hrs	EN 14411
Grouting in walls at +35 °C (BIIa tile):		
- Grey	≈ 12 hrs	EN 14411
- White	≈ 12 hrs	EN 14411
Ready for use at +23 °C / +35 °C (BIIa tile):		
- light foot traffic	≈ 3 – 2 days	EN 14411
- heavy traffic	≈ 4 – 3 days	EN 14411
- swimming pools (+23 °C)	≈ 14 days	EN 14411
Coverage per mm thickness:		
- Grey	≈ 1.3 kg/m ²	
- White	≈ 1.2 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	GEV certified 4616/11.01.02
Tensile adhesion (concrete/porcelain tiles) after 28 days	≥ 2.5 N/mm ²	EN 1348
Shear adhesion (porcelain tiles/porcelain tiles) after 28 days	≥ 2.5 N/mm ²	ANSI A-118.4
Shear adhesion after water immersion	≥ 1 N/mm ²	ANSI A-118.4
Shear adhesion after heating to +100 °C	≥ 1 N/mm ²	ANSI A-118.4
Durability test:		
- adhesion after heat ageing	≥ 2.5 N/mm ²	EN 1348
- adhesion after water immersion	≥ 1 N/mm ²	EN 1348
- adhesion after freeze-thaw cycles	≥ 1 N/mm ²	EN 1348
- adhesion after straining cycles	≥ 1 N/mm ²	SAS Technology
Vertical slip	≤ 0.5 mm	EN 1308
Working temperature	from -30 °C to +90 °C	

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 surface irregularities greater than 15 mm
- protect from direct rainfall for at least 24 hrs
- the temperature, ventilation and absorption of the surface and covering materials to be fixed may cause variations in the adhesive workability and setting times
- use the right size of toothed 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 India Helpline (Toll Free) 1800-200-6550 - info@kerakollindia.com

The Rating classifications refer to the GreenBuilding Rating® Manual 2012. This information was last updated in August 2020 (ref. GBR Data Report - 09.20); 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.