

BIOFIX®



ECO-FRIENDLY MINERAL ADHESIVE WITH AN EXTREMELY LOW CHEMICAL ADDITIVE CONTENT FOR HIGH PERFORMANCE BONDING WITH NO VERTICAL SLIP AND LONG OPEN TIME, FOR PORCELAIN TILES, CERAMIC TILES AND NATURAL STONE.



FEATURES AND ADVANTAGES

with low VOC emissions

BIOFIX® ONLY CONTAINS SUBSTANCES WITH VERY LOW CHEMICAL POLLUTANT EMISSION LEVELS, TO GUARANTEE THE BEST INDOOR AIR QUALITY FOR TILE LAYERS DURING APPLICATION AND ENSURE THE PSYCHOPHYSICAL WELL-BEING OF THE PEOPLE LIVING IN THE BUILDINGS.

with Organic Salts

BIOFIX® ONLY CONTAINS ACTIVE PRINCIPLES IN THE FORM OF HIGH PURITY ORGANIC SALTS (98%). BIOFIX® WITH AN EXTREMELY LOW CHEMICAL ADDITIVE CONTENT IMPROVES THE HYDRATION OF MINERAL CEMENT AND PROTECTS THE ADHESIVE FROM AGGRESSIVE EXTERNAL AGENTS.

with extra-pure inert minerals

BIOFIX® ONLY CONTAINS SPHERICAL QUARTZ SAND AND EXTREMELY PURE POWDER FROM THE KERAKOLL CARRARA MARBLE QUARRIES, WHICH GIVE THE ADHESIVE AN OPTIMUM RHEOLOGY AND VERY LOW WATER ABSORPTION LEVELS.

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GREENBUILDING RATING®

- Category: Inorganic Mineral Products
- Class: Mineral adhesives for ceramic tiles and natural stone
- Rating: Eco 5

	Natural mineral content Grey 65% White 68%	Recycled mineral content Grey 35% White 68%	CO ₂ /kg emission Grey 239 White 217	Very low VOC emissions	Can be recycled as inert material

RATING SYSTEM ACCREDITED BY CERTIFICATION BODY SGS

- The GreenBuilding Rating® is a dependable and reliable evaluation method for measuring and improving the environmental performance of building materials.

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

COMPLIANCE AND CERTIFICATIONS

 1599 0407	KERAKOLL S.p.A. Via dell'Artigianato, 9 41049 Sassuolo - MO - Italy - www.kerakoll.com
14 DoP n° 0226 EN 12004:2007+A1:2012 BIOFIX Improved cementitious adhesive for all internal and external tiling	
Reaction to fire Class A1	
Bond strength, as: initial tensile adhesion strength ≥ 1,0 N/mm²	
Durability, for: tensile adhesion strength after heat ageing ≥ 1,0 N/mm² tensile adhesion strength after water immersion ≥ 1,0 N/mm² tensile adhesion strength after freeze/thaw cycles ≥ 1,0 N/mm²	
Release of dangerous substances See SDS	



* 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).

MATERIALS AND SUBSTRATES

The combination of substrates, materials and uses indicated may not always be possible to achieve. It is essential that you consult the individual product technical sheets to check their suitability. Anything that is not foreseen in this list must be requested directly from Kerakoll Global Service.

SUBSTRATES

CEMENT-BASED SCREEDS AND MORTARS
ANHYDRITE SCREEDS
CEMENT-BASED AND GYPSUM RENDERS/PLASTERS
PLASTERBOARD
WATER AND ELECTRIC HEATED FLOORS
FIBRO-CEMENT
INTERIOR WATERPROOFING PRODUCTS

MATERIALS

CERAMIC TILES
PORCELAIN TILES
TERRACOTTA
KLINKER
MARBLE AND NATURAL STONE
CERAMIC MOSAICS
INTERNAL INSULATING AND SOUNDPROOFING PANELS

USES

ADHESIVE AND FINISHING FLOORS AND WALLS FOR INTERNAL USE - EXTERNAL
DOMESTIC
COMMERCIAL
STREET FURNITURE
SWIMMING POOLS
FOUNTAINS
SAUNAS AND SPA

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PREPARATION AND USE

The indications for use refer to the general principles of application to a high professional standard. Abide by any standards and national regulations.

• 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.

• ADHESIVE PREPARATION

Mixing water (EN 1348)

Grey ≈ 30.5% – 32.5% by weight

Shock White ≈ 31% – 33% by weight

Mixing water on-site

Grey ≈ 8 l / 1 25kg bag ≈ 6 l / 1 20kg bag

Shock White ≈ 8 l / 1 25kg bag ≈ 6 l / 1 20kg bag

For Pools

Grey ≈ 7 l of water 1 l Top Latex Eco / 1 bag

Shock White ≈ 7 l of water 1 l Top Latex Eco / 1 bag

The amount of water to be added, indicated on the packaging, is an approximate guide. It is possible to obtain mixtures with consistency of variable thixotropy according to the application to be made.

• APPLICATION

To guarantee maximum 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.

00773Biofix® Code: P898 2016/05 EN

SAFE LAYING ON SITE

The SAFE LAYING ON SITE method has the aim of testing adhesives both using relevant standards and in some of the most extreme conditions that can be met on site, using rigorous scientific methods and some of the most modern technology currently available in the Kerakoll® GreenLab.

WORKABILITY

Pack 25 kg / 20 kg
Shelf life ≈ 24 months in the original packaging
Protect from humidity

Adhesive thickness from 2 to 10 mm

Coverage ≈ 2,5 – 4 kg/m²

Temperature of the air, substrates and materials
from +5 °C to +35 °C

Pot life at +23 °C ≈ 4 hrs

Open time (BIII tile)
+23 °C ≥ 30 min.

Correction time at +23 °C
BIII tile ≥ 10 min.
BI tile ≥ 30 min.

Foot traffic/grouting of joints at +23 °C
Shock White ≈ 20 hrs
Grey ≈ 18 hrs

Grouting in walls at +23 °C
Shock White ≈ 15 hrs
Grey ≈ 10 hrs

Ready for use at +23 °C
Shock White
- light foot traffic ≈ 3 days
- heavy traffic ≈ 4 days
Grey:
- light foot traffic ≈ 2 days
- heavy traffic ≈ 3 days

SPECIAL NOTES

• PRE-TREATMENT OF SPECIAL SUBSTRATES

Gypsum-based plasters/renders, anhydrite screeds and cellular concrete, for internal use: Primer A Eco

Vinyl sheets for interior use: Keragrip Eco

Please see the technical data sheet on how to use the Primers properly.

• MATERIALS AND SPECIAL SUBSTRATES

Marble and Natural Stone that is subject to deformation or staining due to water absorption requires 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.

• 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 timber, metal, plastic or resilient materials, deformable substrates or subject to vibrations.

On screeds, plasters/renders, concrete not yet cured and affected by important drying shrinkage.

On smooth prefabricated concrete.

When applied over old flooring.

PERFORMANCE

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

Conformity	EC 1-R plus GEV-Emicode	Cert. GEV 4984/11.01.02
Tensile adhesion (concrete/porcelain tiles) after 28 days	≥ 1 N/mm ²	EN 1348
Durability test:		
- Adhesion after heat ageing	≥ 1 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
Working temperature	from -30 °C to +80 °C	

Values taken at +23 °C, 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site.

GENERAL NOTICES

- **Product for professional use**
- abide by any standards and national regulations
- do not use the adhesive to correct substrate irregularities greater than 10 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 Global Service +39 0536.811.516 - globalservice@kerakoll.com

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KERAKOLL
The GreenBuilding Company

KERAKOLL S.p.a.
Via dell'Artigianato, 9 - 41049 Sassuolo (MO) Italy
Tel +39 0536 816 511 - Fax +39 0536 816 581
info@kerakoll.com - www.kerakoll.com

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The Eco and Bio classifications refer to the GreenBuilding Rating® Manual 2013. This information was last updated in March 2016 (ref. GBR Data Report – 04.16); please note that additions and/or amendments may be made over time by KERAKOLL SpA; for the latest version, see www.kerakoll.com. CFP data available in CFP Data Report 05.16. 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.