

Superflex Eco

Eco-friendly, elastic polyurethane organic mineral adhesive for high-performance and high-adhesion fixing with no vertical slip on deformable surfaces, ideal for use in GreenBuilding. Safeguards the health of operators.

Superflex Eco develops high elasticity and non-sag effect making it safe to fix water-sensitive ceramic tiles and natural stone even diagonally or from top to bottom on highly deformable and expandable, absorbent and non-absorbent substrates.



GREENBUILDING RATING®

Superflex Eco
 - Category: Organic Mineral products
 - Fixing ceramic tiles and natural stone
 - Rating: Eco 2

	Natural mineral content 52%				Non-toxic and non-hazardous

RATING SYSTEM ACCREDITED BY CERTIFICATION BODY SGS

PRODUCT STRENGTHS

- Floors and walls, for internal and external use
- Open and adjustability time ≥ 30 min.
- Suitable for vitrified tiles, ceramics, large formats, low thickness slabs and natural stone
- Ideal for marble and natural stone that tends to form stains and sag in the presence of humidity
- Ideal for resin-based engineered stones
- Easy and light to spread thanks to the Light Work technology

ECO NOTES

- Formulated with locally-sourced minerals meaning lower greenhouse gas emission during transportation
- Improved on-site safety guaranteed

AREAS OF USE

Use
 High-elasticity adhesive for fixing of ceramic tiles, vitrified tiles, marble and natural stone, on floors and walls, on absorbent and non-absorbent, deformable surfaces.

Materials:

- vitrified tiles, low thickness slabs, ceramic tiles, klinker, cotto, glass and ceramic mosaic, natural stone, marble, granite and recomposed materials also subjected to staining or deformation due to water absorption and thermal expansion

Surfaces:

- mineral screed
- mineral screeds made with Biocem mineral binder
- cement-based screeds
- prefabricated concrete or fresh concrete castings
- cement plasters and cement-lime mortar
- floors and walls in polyurethane resin, glazed tiles, cement-based and resin floor tiles, porcelain tiles
- wood, metals, rubber, PVC, linoleum, glass surfaces

Internal and external flooring and walls, in domestic, commercial and industrial applications, for street furniture, underfloor heating systems, work surfaces in industrial settings or in laboratories, swimming pools, Turkish baths, thermal water baths and fountains, also in areas subject to freezing. Fixing to sheet metal used for prefabricated bathrooms, on worktops and kitchens, balconies, terraces, flat roofs and domes.

Do not use
 In contact with polystyrene or on substrates which are not fully cured and subjected to moisture rising.

INSTRUCTIONS FOR USE

Preparation of substrates

Substrates must be compact and consistent, free from dust, oil and grease, free from any rising damp, with no loose, flaky, or imperfectly anchored parts. The surface must be stable, without cracks and have already completed the curing period of hygrometric shrinkage. Uneven areas must be corrected with suitable smoothing and finishing products.

Preparation

Superflex Eco is prepared by mixing together parts A and B from the bottom upwards, using a low-rev ($\approx 400/\text{min.}$) helicoidal agitator, respecting the preset ratio of 3.2 : 0.8 of the packs. Pour 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 user must mix a quantity of adhesive which can be consumed within 1 hour at $+23\text{ }^\circ\text{C}$ / 50% R.H. Packs of Superflex Eco must be stored at a temperature of $\approx +20\text{ }^\circ\text{C}$ for at least 2/3 days prior to use.

Application

Superflex Eco must be applied with a suitable, toothed trowel of the type and dimensions most appropriate for the format and type of tiles used. Using the smooth part of the trowel, apply a fine layer of product, pressing down onto the surface in order to ensure maximum adhesion. Press down each tile to allow for maximum coverage of the surface. In environments subjected to heavy traffic, in external applications and wherever high-elasticity fixing system is required, use the double-spread technique to ensure 100% application of the product to the rear of the tiles.

Cleaning

Residues of Superflex Eco can be cleaned from tools and covered surfaces with water and alcohol while the adhesive is still fresh. Once cured, the adhesive can only be removed by mechanical means.

ABSTRACT

High-performance fixing of vitrified tiles, marble, granite and ceramic tiles on deformable substrates must be carried out using two-component elastic, eco-friendly organic mineral adhesive with no vertical slip, compliant with EN 12004 – class R2 T, GreenBuilding Rating® Eco 2, such as Superflex Eco manufactured by Kerakoll. The surface must be clean, free from any loose, flaky parts and adequately matured. A ___ mm toothed trowel must be used for an average coverage of \approx ___ kg/m^2 . Create elastic fractionizing joints every ___ m^2 . Tiles must be fixed with joints of ___ mm width.

TECHNICAL DATA COMPLIANT WITH KERAKOLL QUALITY STANDARD

Appearance	Part A white paste / Part B white paste	
Specific weight	Part A $\approx 1.46\text{ kg}/\text{dm}^3$ / Part B $\approx 1.78\text{ kg}/\text{dm}^3$	
Mineralogical nature of inert material	crystalline carbonate	
Grading	$\approx 0 - 100\text{ }\mu\text{m}$	
Shelf life	≈ 24 months in the original packaging	
Warning	Protect from frost	
	Avoid direct exposure to sunlight and sources of heat	
Pack	monopack 4 kg (3,2+0,8 kg)	
Mixing ratio	Part A : Part B = 3,2 : 0,8	
Viscosity of the mixture	$\approx 750000\text{ mPa}\cdot\text{s}$, rotor 7 RPM 5	Brookfield method
Specific weight of the mixture	$\approx 1,5\text{ kg}/\text{dm}^3$	
Temperature range for application	from $+10\text{ }^\circ\text{C}$ to $+30\text{ }^\circ\text{C}$	
Pot life	≥ 30 min.	
Open time	≥ 30 min.	EN 1346
Adjustability	≥ 30 min.	
Vertical slip	$\leq 0,5\text{ mm}$	EN 1308
Foot traffic	≈ 24 hrs	
Grouting	≈ 12 hrs on walls / ≈ 24 hrs on floors	
Interval before normal use	≈ 3 days	
Coverage *	$\approx 1,5\text{ kg}/\text{m}^2$ per mm of thickness	

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, i.e. temperature, ventilation and absorbcency level of the surface and of the materials fixed.

() Can vary depending on the irregularity of the surface and the format of the tile.*

PERFORMANCE

HIGH-TECH

Shear adhesion after 7 days	≥ 4 N/mm ²	EN 12003
Durability test:		
- shear adhesion after water immersion	≥ 3,5 N/mm ²	EN 12003
- shear adhesion after thermal shock	≥ 3,5 N/mm ²	EN 12003
Adhesion to concrete after 7 days	≥ 2.5 N/mm ² (concrete yield)	EN 1348
Vertical slip	≤ 0,5 mm	EN 1308
Ultimate elongation after 7 days	≈ 30%	
Working temperature	from -40 °C to +70 °C	
Conformity	R2	EN 12004
LEED®		
LEED® Points Contribution*	LEED® Points	
MR Credit 5 Regional Materials	up to 2	GBC Italia

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

* LEED® is an environmental performance measurement system designed for new and existing commercial, institutional, and domestic buildings, based on energy and environmental principles commonly recognized and accepted by the international scientific community. The LEED® building sustainability assessment system is a voluntary system. To calculate the score, consult the rules provided by the Italy LEED® Manual (edition 2009). © 2010, Green Building Council Italy, U.S. Green Building Council, all rights reserved

WARNING

- Product for professional use

- abide by any standards and national regulations
- use at temperatures between +10 °C and +30 °C
- use packs which have been stored for 2/3 days before use at +20 °C
- strictly keep to the mixing ratio of 3.2 : 0.8. For partial mixing, weigh the two parts precisely
- workability times may vary considerably, depending on environmental conditions and the temperature of the tiles
- protect against direct rain for at least 12 hrs
- do not fix on substrates subject to moisture rising or which are not completely dry
- 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 Eco and Bio classifications refer to the GreenBuilding Rating® Manual 2012. This information was last updated in May 2018 (ref. GBR Data Report - 06.18); 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.