

# Fugabella® Eco Flex

**Certified, eco-friendly, naturally bacteriostatic and fungistatic, rapid setting and hardening mineral grout stabilized with pure NHL 5 natural lime mortar for extremely colour-fast joints from 2 mm to 12 mm in thickness, ideal for use in GreenBuilding. Single-component with very low volatile organic compound emissions, recyclable as an inert material at the end of its life.**

Fugabella® Eco Flex is very easy to clean and surfaces are quickly ready for normal use, even at low temperatures, ensuring resistance by creating a water-drop effect on floors and coverings exposed to heavy rainfall or frequent washing.



## GREENBUILDING RATING®

### Fugabella® Eco Flex

- Category: Inorganic mineral products
- Laying ceramic tiles and natural stone
- Rating\*: Eco 2

\* Rating based on average colour formulations

|  |  |  |  |                            |                                       |
|--|--|--|--|----------------------------|---------------------------------------|
|  |  |  |  |                            |                                       |
|  |  |  |  | <br>Very low VOC emissions | <br>Can be recycled as inert material |

RATING SYSTEM ACCREDITED BY CERTIFICATION BODY SGS

## PRODUCT STRENGTHS

- Floors and walls, for internal and external use
- Fine-grain finish
- Superior flexibility
- Water-repellent compound with water-drop effect
- High CATAS-tested colour fastness
- Colour uniformity
- Collections of 14 colours: Classic, Design
- Suitable for porcelain tiles, ceramics, low thickness slabs and natural stone
- Easy to clean and maintain
- Suitable for underfloor heating systems



## ECO NOTES

- Can be recycled as mineral inert material, avoiding waste disposal costs and environmental impact
- Natural bacteriostatic product stabilized with pure natural lime to avoid the use of pesticide additives

## AREAS OF USE

### Use

High-performance grouting of joints from 2 to 12 mm, with smooth finish, high degree of hardness, water-repellence with water-drop effect, rapid setting and hardening.

### Materials to be grouted:

- porcelain tiles, low thickness slabs, ceramic tiles, klinker, cotto, glass and ceramic mosaic, of all types and formats
- natural stone, recomposed materials, marble

Internal and external flooring and walls, in domestic, commercial and industrial applications and street furniture, in environments subject to heavy traffic, swimming pools, baths and fountains, also in areas subject to thermal shock and freezing.

### Do not use

On joints less than 2 mm and more than 12 mm in width, on floors and walls where specific chemical resistances or absolutely no water absorption are required; to grout elastic expansion or fractionising joints; on substrates which are highly deformable, not perfectly dry or subject to moisture rising.

## INSTRUCTIONS FOR USE

### Preparation of substrates

The surfaces to be grouted must be dry. Grout joints in accordance with BS 5385, parts 1-5 and the recommended waiting time indicated on the relative data sheet for the adhesive used. For mortar substrates, wait at least 7 – 14 days depending on screed thickness, weather conditions and on the level of absorption of the covering and the substrate.

Any water or moisture rising can cause salt to build up on the surface of the grout or cause shade variations due to the uneven evaporation of the remaining water through the grout.

## INSTRUCTIONS FOR USE

Joints must be free from any excess adhesive, even if already hardened. Furthermore they must be of an even depth equal to at least 2/3 of the thickness of the tile covering, to avoid any variations in colour.

In the case of highly absorbent tiles or high temperatures, the surface of the tilework should be dampened prior to grouting the joints, avoiding not to leave any water in the joints themselves.

Before grouting with contrasting colours to the tiles, make sure they can be cleaned.

### Instruction for use

Prepare Fugabella® Eco Flex in a clean container, first of all pouring in a quantity of water equal to approximately ¾ of the amount required. Gradually pour the powder into the container, mixing the paste from the bottom upwards with a low-rev (400/min.) electrical mixer. Add more water until the desired consistency is obtained. The mixture must be of smooth consistency and without any lumps. The amount of water to be added, indicated on the packaging, is an approximate guide and will vary depending on the different colours. Prepare all mixtures required to complete the process using the same amount of water, in order to avoid any variations in grout shade. Adding extra water does not improve the workability of the grout, and may cause shrinkage in the plastic phase of drying and result in a less effective final performance.

Fugabella® Eco Flex is applied evenly into the joints using a hard rubber spreader or float, working at a diagonal to the tiles until all the joints have been filled. Remove most of the excess grout.

When the grout is touch dry within the joint, start cleaning using a clean, damp sponge with a circular movement. Finish cleaning by wiping diagonally across the tiles. Keep the water clean and change it regularly. Using excessive amounts of water may cause problems with grout shading, always make sure the sponge is rinsed properly and is only damp when cleaning.

### Tools

Mixing agitators, hard rubber spreaders or floats, sponge and trays suitable to clean the coating materials. Wash tools with water before the product hardens.

## SPECIAL NOTES

When using Fugabella® Eco Flex to grout joints in large surface areas, use suitable electrical equipment to increase application speed and cleaning times. In particular, cleaning with electric sponges can be easily carried out and ensures superior coverage and perfect results in aesthetic terms.

Before grouting highly porous surface coverings, or at high temperatures, it is advisable to wipe a damp sponge over the surface to counteract the porosity or to cool the surface, being careful not to cause water to stagnate in the joints.

## TECHNICAL DATA COMPLIANT WITH KERAKOLL QUALITY STANDARD

|  |   |                 |
|--|---|-----------------|
| Appearance                             | coloured pre-mixed  |                 |
| Apparent volumetric mass               | ≈ 1.25 kg/dm <sup>3</sup>   | UEAtc/CSTB 2435 |
| Mineralogical nature of inert material | silicate - crystalline carbonate  |                 |
| Average granulometric composition      | ≈ 140 µm  |                 |
| Shelf life                             | ≈ 6 months / 25 kg bag / ≈ 12 months / 5 kg bag, in the original packaging and in a dry place |                 |
| Pack                                   | 25 kg - 5 kg bags   |                 |
| Mixing water                           | ≈ 4.5 ℓ / 1 x 25 kg bag / ≈ 0.9 ℓ / 1 x 5 kg bag  |                 |
| Specific weight of the mixture         | ≈ 1.86 kg/dm <sup>3</sup>   | UNI 7121        |
| Pot life                               | ≥ 30 min.   |                 |
| Temperature range for application      | from +5 °C to +30 °C  |                 |
| Width of joints                        | from 2 to 12 mm   |                 |
| Foot traffic                           | ≈ 3 hrs   |                 |
| Grouting after laying:                 |   |                 |
| - with adhesive                        | see characteristics of adhesive   |                 |
| - mortar                               | ≈ 7 – 14 days   |                 |
| Interval before normal use             | ≈ 24 hrs  |                 |
| Coverage                               | see Coverage table  |                 |

*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.*

## COVERAGE TABLE

|            | Format       | Thickness | grammes/m <sup>2</sup> joint width |        |        |        |        |
|------------|--------------|-----------|------------------------------------|--------|--------|--------|--------|
|            |              |           | 1 mm                               | 2 mm   | 3 mm   | 5 mm   | 10 mm  |
| Mosaic     | 2x2 cm       | 3 mm      | ≈ 580                              | ≈ 1160 | ≈ 1740 | ≈ 2900 | ≈ 5800 |
|            | 5x5 cm       | 4 mm      | ≈ 320                              | ≈ 640  | ≈ 960  | ≈ 1600 | ≈ 3200 |
| Tiles      | 30x60 cm     | 4 mm      | ≈ 40                               | ≈ 80   | ≈ 120  | ≈ 200  | ≈ 400  |
| Marble     | 60x60 cm     | 4 mm      | ≈ 30                               | ≈ 60   | ≈ 90   | ≈ 150  | ≈ 300  |
|            | 20x20 cm     | 8 mm      | ≈ 165                              | ≈ 330  | ≈ 495  | ≈ 825  | ≈ 1650 |
|            | 30x30 cm     | 9 mm      | ≈ 125                              | ≈ 250  | ≈ 375  | ≈ 625  | ≈ 1250 |
|            | 40x40 cm     | 10 mm     | ≈ 105                              | ≈ 210  | ≈ 315  | ≈ 525  | ≈ 1050 |
|            | 60x60 cm     | 10 mm     | ≈ 70                               | ≈ 140  | ≈ 210  | ≈ 350  | ≈ 700  |
|            | 30x60 cm     | 10 mm     | ≈ 100                              | ≈ 200  | ≈ 300  | ≈ 500  | ≈ 1000 |
|            | 20x20 cm     | 14 mm     | ≈ 285                              | ≈ 570  | ≈ 855  | ≈ 1425 | ≈ 2850 |
|            | 30x30 cm     | 14 mm     | ≈ 190                              | ≈ 380  | ≈ 570  | ≈ 950  | ≈ 1900 |
| Terracotta | 30x30 cm     | 15 mm     | ≈ 205                              | ≈ 410  | ≈ 615  | ≈ 1025 | ≈ 2050 |
| Klinker    | 12.5x24.5 cm | 12 mm     | ≈ 295                              | ≈ 590  | ≈ 885  | ≈ 1475 | ≈ 2950 |

The data provided must be considered merely as an indication of the grout coverage, averaged out based on our experience and taking into account normal site wastage. The following may vary according to specific conditions at the building site: roughness of tile, excess of residual product, lack of surface flatness, temperatures, seasonal conditions.

## PERFORMANCE

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




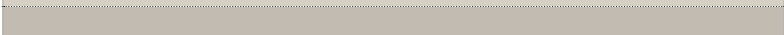
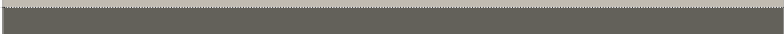





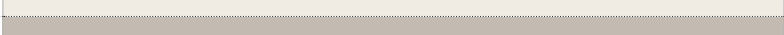



Conformity EC 1-R GEV-Emicode GEV certified 1961/11.01.02

### HIGH-TECH

|                                       |                         |                    |
|---------------------------------------|-------------------------|--------------------|
| Flexural strength after 28 days       | ≥ 10 N/mm <sup>2</sup>  | EN 12808-3         |
| Compressive strength after 24 hrs     | ≥ 15 N/mm <sup>2</sup>  | ISO 13007-4.1.4    |
| Compressive strength after 28 days    | ≥ 52 N/mm <sup>2</sup>  | ISO 13007-4.1.4    |
| Resistance to frost-thaw cycles:      |                         |                    |
| - Flexural                            | ≥ 5.5 N/mm <sup>2</sup> | EN 12808-3         |
| - Compressive                         | ≥ 55 N/mm <sup>2</sup>  | EN 12808-3         |
| Resistance to abrasion after 28 days  | ≤ 302 mm <sup>3</sup>   | EN 12808-2         |
| Water absorption after 30 min.        | ≤ 0.8 g                 | EN 12808-5         |
| Water absorption after 240 min.       | ≤ 1.8 g                 | EN 12808-5         |
| Colour Fastness                       | see colour chart        | UNI EN ISO 105-A05 |
| Resistance to fungal contamination    | class F+                | CSTB SB-08-103     |
| Resistance to bacterial contamination | class B+                | CSTB SB-2008-097   |
| Working temperature                   | from -40 °C to +90 °C   |                    |
| Conformity                            | CG2F WA                 | ISO 13007-3        |

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

## COLOUR CHART

| Fugabella® Eco Flex Colours |  | Colour Fastness*<br>GSc (Daylight)<br>EN ISO 105-A05<br>standard |
|-----------------------------|--|--|
| 01 White                    |  | 4  |
| 02 Light Grey               |  | 4  |
| 03 Pearl Grey               |  | 4.5  |
| 04 Iron Grey                |  | 4.5  |
| 05 Anthracite               |  | 4.5  |
| 06 Black                    |  | 4.5  |
| 07 Jasmin                   |  | 3.5  |
| 08 Bahama Beige             |  | 4  |
| 51 Silver                   |  | 3.5  |
| 50 Pergamon                 |  | 4.5  |
| 45 Limestone                |  | 4.5  |
| 52 Dove Grey                |  | 4.5  |
| 44 Cement Grey              |  | 4.5  |
| 48 Coffee                   |  | 4.5  |

Legend

|               |   |
|---------------|---|
| from 5 to 4   | high colour fastness; for internal and external use |
| from 3.5 to 3 | good colour fastness; for internal and external use |
| from 2.5 to 1 | limited colour fastness; for internal use           |

*The shades shown are intended as an indication only.*

## WARNING

- **Product for professional use**
- abide by any standards and national regulations
- in swimming pools, check the suitability of the product based on the type of water and the type of chemical or physical treatment used
- grout shades are not reproducible and may even vary during application, as a result of application techniques and ambient conditions during and immediately after the grout has been applied
- workability times may vary considerably, depending on environmental conditions and on tile and substrate absorbency
- protect the grout from direct rainfall and sun for at least 12 hours after application
- in warm climates cool the surface and mix the grout with cold water
- grouting joints on substrates that are still damp will cause variations in the grout
- if necessary, ask for the safety data sheet
- for any other issues, contact the Kerakoll Worldwide Global Service 01527 578000 - [info@kerakoll.co.uk](mailto:info@kerakoll.co.uk)

The Eco and Bio classifications refer to the GreenBuilding Rating® Manual 2012. This information was last updated in January 2018 (ref. GBR Data Report - 02.18); 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 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.