

Fugabella® Eco Marmi

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 0 mm to 5 mm in thickness, ideal for use in GreenBuilding. Single-component with very low volatile organic compound emissions, contains recycled raw materials. Recyclable as an inert material at the end of its life.

Fugabella® Eco Marmi develops a smooth, polished-effect with a water-gloss look just hours after application and grouts in marble and natural stone coverings free of efflorescences and streaks.



GREENBUILDING RATING®

Fugabella® Eco Marmi

- Category: Inorganic Mineral Products
- Class: Mineral grouts
- Rating: Eco 3

		Recycled mineral content 48%		Very low VOC emissions	Can be recycled as inert material

RATING SYSTEM ACCREDITED BY CERTIFICATION BODY SGS

PRODUCT STRENGTHS

- Floors and walls, for internal and external use
- Water-repellent compound with water-drop effect
- High-whiteness colour uniformity
- High CATAS-tested colour fastness
- Suitable for porcelain tiles, ceramics, low thickness and corrected slabs and natural stone
- Easy to clean and maintain
- Suitable for underfloor heating systems
- Capable of bearing foot traffic after only 2 hours



ECO NOTES

- Contains recycled materials thereby reducing the damage to the environment caused by extracting pure raw materials
- 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 0 to 5 mm, polished-effect finish, high level of hardness, water-repellent with water-drop effect, with extra-rapid setting and hardening.

Materials to be grouted:

- marble, natural stone, granite and recomposed materials, ceramic tiles, low thickness and low water absorbency slabs, porcelain tiles

Internal and external flooring and walls, in domestic, commercial and industrial applications and street furniture, with materials to be smoothed on-site, in environments subject to heavy traffic, swimming pools, tanks and fountains, also in areas subject to thermal shock and freezing.

Do not use

On joints more than 5 mm in width, on floors and walls where specific chemical resistances or absolutely no water absorption are required; with highly water-absorbent coating materials; 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

Before grouting joints, check that tiles have been laid correctly and are anchored perfectly to the substrate. Substrates must be perfectly dry. Grout joints in accordance with 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, ambient 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 on account of the uneven evaporation of remaining water through the grout.

* 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

Joints must be free from any excess adhesive, even if already hardened, and must be of an even depth of at least $\frac{2}{3}$ of the overall thickness of the tile covering. This is necessary to prevent different drying times of each different thickness, with subsequent shade variations.

Any dust and loose debris must be removed from the joints by carefully cleaning them with a vacuum cleaner. In the case of highly absorbent tiles or high temperatures, a damp sponge should be passed across the surface of the tilework prior to grouting joints, in order to prevent any water stagnation.

Before grouting joints with contrasting tile colours check the grout can be completely removed from the tile surface, as highly porous surfaces may make cleaning difficult. It is advisable to perform a preliminary test on tiles not to be laid or in a small, concealed area. In these cases we recommend treating the covering with specific protective products, being careful to avoid applying them to the joints.

Preparation

Prepare Fugabella® Eco Marmi in a clean container, first of all pouring in a quantity of water equal to approximately $\frac{3}{4}$ of that which will be required. Gradually add Fugabella® Eco Marmi to the container, mixing the paste from the bottom upwards with a low-rev (≈ 400 /min) helicoidal agitator. Add more water until the desired consistency is obtained. The mixture must be of smooth consistency and without any lumps. For best results, and to mix larger quantities of the grout, a stirring device with vertical blades and slow rotation is recommended. Specific polymers with high-dispersion properties ensure that Fugabella® Eco Marmi is immediately ready for use. As this is a quick-setting grout, only prepare an amount that can be used within 25 min. at 23 °C, 50% R.H. The amount of water to be added, indicated on the packaging, is an approximate guide. It is possible to obtain mixtures with a consistency of variable thixotropy, depending on the type of application and the width of joints. Adding extra water does not improve the workability and the cleanability of the grout, and may cause shrinkage in the plastic phase of drying and result in less effective final performance. Prepare all mixtures required to complete the process using the same amount of water, in order to avoid any variations in grout shade.

Application

Fugabella® Eco Marmi must be applied evenly on the tile covering with a spreader or hard rubber float. Seal the entire surface by completely grout the joints, applying the grout diagonally to the tiles. Remove most of the excess grout immediately leaving only a thin film on the tile.

Cleaning

Begin cleaning the tilework when the grout starts to firm into the joint. On completion, clean up the surface using a thick, large-sized sponge damped in clean water to avoid removing grout from the joints. Make sure clean water is used at all times, using appropriate trays with grills and cleaning rollers for the sponge. Use circular movements to soften the film of hardened grout on the tiles. Finish cleaning up by dragging the sponge diagonally across the tiles while applying water evenly over the tiles, in order to prevent any shade variations. Residual traces of grout can be removed from tools with water before the product has hardened.

SPECIAL NOTES

When grouting large areas and joints of up to 2 mm in width with Fugabella® Eco Marmi it is possible to increase the application speed and final cleaning by using a higher mixing ratio and special electrical equipment. In particular, an electric sponge grout remover will make cleaning easier and faster, ensuring a perfect finish at the same time. In the case of coating to be smoothed on-site, remove as much grout as possible, leaving just a film on the coating. Water smoothing operations can be carried out after 24 hrs. 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.

ABSTRACT

Certified, high-performance grouting of marble, all types of natural stone, ceramic tiles and low thickness slabs, with eco-friendly, naturally bacteriostatic and fungistatic mineral grout with high colour fastness, compliant with standard ISO 13007-3 – class CG2F WA, GreenBuilding Rating® Eco 3, such as Fugabella® Eco Marmi by Kerakoll Spa. Joints must be dry and free from traces of adhesive and loose debris. Use a spreader or hard rubber float to apply the grout and suitable sponges and clean water to clean joints on completion. Joints of ____ mm width and tiles ____ x ____ cm in size will give an average coverage of approx. ____ kg/m². Existing elastic expansion and fractionizing joints must be respected.

TECHNICAL DATA COMPLIANT WITH KERAKOLL QUALITY STANDARD

Appearance	White pre-mixed	
Apparent volumetric mass	$\approx 1,06$ kg/dm ³	UEAtc/CSTB 2435
Mineralogical nature of inert material	crystalline carbonate	
Average granulometric composition	≈ 50 μ m	
Shelf life	≈ 6 months in the original packaging in dry environment	
Pack	Bags 5 kg	
Mixing water	≈ 1.6 l / 1 x 5 kg bag	
Specific weight of the mixture	$\approx 1,91$ kg/dm ³	UNI 7121
Pot life	≥ 25 min.	
Temperature range for application	from +5 °C to +30 °C	
Width of joints	from 0 to 5 mm	
Foot traffic	≈ 2 hrs	
Grouting after laying:		
- with adhesive	see characteristics of adhesive	
- mortar	$\approx 7 - 14$ days	
Interval before normal use / smoothing	≈ 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 ² joint width			
			1 mm	2 mm	3 mm	5 mm
Mosaic	2x2 cm	3 mm	≈ 500	≈ 1000	≈ 1500	≈ 2500
	5x5 cm	4 mm	≈ 275	≈ 550	≈ 825	≈ 1375
Tiles	30x60 cm	4 mm	≈ 35	≈ 70	≈ 105	≈ 175
Marble	60x60 cm	4 mm	≈ 25	≈ 50	≈ 75	≈ 125
	20x20 cm	8 mm	≈ 140	≈ 280	≈ 420	≈ 700
	30x30 cm	9 mm	≈ 105	≈ 210	≈ 315	≈ 525
	40x40 cm	10 mm	≈ 90	≈ 180	≈ 270	≈ 450
	30x60 cm	10 mm	≈ 90	≈ 180	≈ 270	≈ 450
	60x60 cm	10 mm	≈ 60	≈ 120	≈ 180	≈ 300
	20x20 cm	14 mm	≈ 245	≈ 490	≈ 735	≈ 1225
	30x30 cm	14 mm	≈ 165	≈ 330	≈ 495	≈ 825
Terracotta	30x30 cm	15 mm	≈ 175	≈ 350	≈ 525	≈ 875
Klinker	12,5x24,5 cm	12 mm	≈ 255	≈ 510	≈ 765	≈ 1275

PERFORMANCE

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

Conformity EC 1 GEV-Emicode GEV certified 1962/11.01.02

HIGH-TECH

Flexural strength after 28 days	≥ 9 N/mm ²	EN 12808-3
Compressive strength after 24 hrs	≥ 15 N/mm ²	ISO 13007-4.1.4
Compressive strength after 28 days	≥ 45 N/mm ²	ISO 13007-4.1.4
Resistance to frost-thaw cycles:		
- Flexural	≥ 3,5 N/mm ²	EN 12808-3
- Compressive	≥ 40 N/mm ²	EN 12808-3
Resistance to abrasion after 28 days	≤ 435 mm ³	EN 12808-2
Water absorption after 30 min.	≤ 0,6 g	EN 12808-5
Water absorption after 240 min.	≤ 1,6 g	EN 12808-5
Colour fastness (white)	5 (high: for internal and external use)	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.

WARNING

- **Product for professional use**
- abide by any standards and national regulations
- workability times may vary considerably, depending on environmental conditions and on tile and substrate absorbency
- ceramic or natural stone tiles with porous surfaces may not be suitable for the use of ultra-fast setting grout, causing problems when cleaning; always test beforehand
- in warm climates cool the surface and mix the grout with cold water
- protect the grout from direct rainfall and sun for at least 6 hours after application
- wait at least 24 hours after grouting before smoothing on-site
- if necessary, ask for the safety data sheet
- for any other issues, contact the Kerakoll Worldwide Global Service +39 0536 811 516 - globalservice@kerakoll.com

The Eco and Bio classifications refer to the GreenBuilding Rating® Manual 2013. This information was last updated in November 2013 (ref. GBR Data Report - 12.13); 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.

Kerakoll
Quality
System

ISO 9001
CERTIFIED

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