

Fugabella® Eco 2-12

Eco-friendly, naturally bacteriostatic and fungistatic, stabilized mineral grout containing pure NHL (natural hydraulic lime) 5 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 2-12 develops fine-grain, smooth consistency, specific to decorate floors quickly, fill joints fully and leave the surface easy to clean, whatever the conditions.



Product Strengths

- High hardness
- Water-repellent and low absorption
- Floors and walls, Internal, external
- High CATAS-tested colour fastness
- Classic 12-colour collection
- Colour uniformity
- Ideal for porcelain tile floors
- Suitable for porcelain tiles, ceramics, low thickness slabs and natural stone
- Easy to clean and maintain



GreenBuilding Rating

	 Mineral ≥ 60%	 Recycled Mineral ≥ 30%	 ≤ 250 g/kg	 Low Emission	 Recyclable
	Natural mineral content 60%			Very low VOC emissions 49 µg/m ³	Can be recycled as inert material

* Rating calculated on an average of the colour formulae

Fugabella® Eco 2-12

- Category: Inorganic Mineral Products
- Class: Mineral Grouts
- Rating*: Eco 3

Areas of use

Use

High-performance grouting of joints from 2 to 12 mm with smooth finish and reduced water absorption.

Suitable to grout:

- homogeneous tiles,
- ceramic tiles,
- klinker, terracotta, ceramic mosaic,
- natural stone,
- agglomerate materials,
- marbles of all types and formats.

Use in domestic, commercial and industrial applications, for environments subject to heavy traffic, swimming pools, tanks and fountains and also in areas subject to thermal shock and freezing.

Do not use

Do not use on joints less than 2 mm or more than 12 mm in width, on floors and walls where resistance from chemical attack or absolutely no water absorbency are required; on substrates which are highly deformable, not completely 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.

Joints must be free from any excess adhesive, even if already hardened. Furthermore they must be of an even depth equal to at least $\frac{2}{3}$ 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, by making a small trial area.

Instruction for use

Prepare Fugabella® Eco 2-12 in a clean container, first of all pouring in a quantity of water equal to approximately $\frac{3}{4}$ 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 2-12 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 then leave to haze. Finish cleaning by wiping diagonally across the tiles with a clean damp sponge. 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

Grouting of large format façade coverings: ($\geq 900 \text{ cm}^2$), on deformable substrates, to increase water resistance or when the surfaces are later to be smoothed and cleaned, replace the mixing water either entirely or in part with Fugaflex Eco elastomeric latex for cement-based grouts.

Coverage

	Format	Thickness	g/m ² - joints width 1 mm				
			1 mm	2 mm	3 mm	5 mm	10 mm
Mosaic	2x2 cm	3 mm	≈ 600	≈ 1200	≈ 1800	≈ 3000	≈ 6000
	5x5 cm	4 mm	≈ 330	≈ 660	≈ 990	≈ 1650	≈ 3300
Tiles	30x60 cm	4 mm	≈ 40	≈ 80	≈ 120	≈ 200	≈ 400
Marble	60x60 cm	4 mm	≈ 30	≈ 60	≈ 90	≈ 150	≈ 300
	20x20 cm	8 mm	≈ 170	≈ 340	≈ 510	≈ 850	≈ 1700
	30x30 cm	9 mm	≈ 125	≈ 250	≈ 375	≈ 625	≈ 1250
	40x40 cm	10 mm	≈ 105	≈ 210	≈ 315	≈ 525	≈ 1050
	30x60 cm	10 mm	≈ 100	≈ 200	≈ 300	≈ 500	≈ 1000
	60x60 cm	10 mm	≈ 60	≈ 120	≈ 180	≈ 300	≈ 600
	20x20 cm	14 mm	≈ 300	≈ 600	≈ 900	≈ 1500	≈ 3000
	30x30 cm	14 mm	≈ 195	≈ 380	≈ 585	≈ 975	≈ 1950
Terracotta	30x30 cm	15 mm	≈ 210	≈ 420	≈ 630	≈ 1050	≈ 2100
Klinker	12,5x24,5 cm	12 mm	≈ 305	≈ 610	≈ 915	≈ 1525	≈ 3050

Technical data compliant with Kerakoll Quality Standard

Appearance	Coloured pre-mixed	
Apparent volumetric mass	≈ 1,38 kg/dm ³	UEAtc/CSTB 2435
Mineralogical nature of inert material	silicate - crystalline carbonate	
Average granulometric composition	≈ 158 μm	
Shelf life	≈ 12 months in the original packaging in dry environment	
Pack	bags 25 / 5 kg	
Mixing water	≈ 5,2 l / 1 bag 25 kg – ≈ 1 l / 1 bag 5 kg	
Specific weight of the mixture	≈ 2 kg/dm ³	UNI 7121
Pot life	≥ 180 min.	
Temperature range for application	from +5 °C to +35 °C	
Width of joints	from 2 to 12 mm	
Foot traffic	≈ 12 - 24 hrs	
Grouting after laying:		
- with adhesive	see characteristics of adhesive	
- mortar	≈ 7 - 14 days	
Interval before normal use	≈ 3 days	
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.

Performance High-Tech

Flexural strength after 28 days	≥ 7 N/mm ²	EN 12808-3
Compressive strength after 28 days	≥ 30 N/mm ²	EN 12808-3
Resistance to frost-thaw cycles:		
- flexural	≥ 3,5 N/mm ²	EN 12808-3
- compressive	≥ 39 N/mm ²	EN 12808-3
Resistance to abrasion after 28 days	≤ 446 mm ³	EN 12808-2
Water absorption after 30 min.	≤ 1,5 g	EN 12808-5
Water absorption after 240 min.	≤ 3,5 g	EN 12808-5
Colour Fastness	see colours 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	CG2 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.

Colours

Fugabella® Eco 2-12 Colours		Colour Fastness* GSc (Daylight) Standard EN ISO 105-A05
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
09 Caramel		4,5
10 Terracotta		4,5
11 Brown		4,5
12 Walnut		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

Warning

- **Product for professional use**

- workability times and the shade of colour may vary considerably, depending on weather conditions and on the tile and substrate absorbency.
- grouting joints on substrates that are still damp will cause variations in the grout.
- protect the product from rain and direct sunlight for at least 12 hrs after application.
- if necessary, ask for the safety data sheet
- for any other issues, contact the Kerakoll Worldwide Global Service - globalservice@kerakoll.com

This information was last updated in November 2010; please note that additions and/or amendments may be made over time by KERAKOLL SpA; for the latest version, see www.kerakoll.com
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