

FUGA-PAVE Flex CH (Cement-Hybrid) GROUT

Technical Data sheet

Fuga-Pave Flex CH is a resin-cement for grouting ceramic and porcelain tiles, mosaics, natural stone and concrete products. It is available in a 5 colours. Fuga-Pave Flex CH is a Green product.

The ground-breaking hybrid grout Fuga-Pave Flex CH is ideal when decorating any surface in porcelain, ceramic tiles, mosaic, natural stone and concrete products.

Fuga-Pave Flex CH achieves performance characteristics such as water-repellence, very low water absorption, high surface hardness, high resistance to the most common acidic substances and total colour uniformity.

Rating 4*

- Regional Mineral $\geq 60\%$
- Recycled Mineral $\geq 30\%$ CO₂ ≤ 250 g/kg
- VOC Very Low Emission
- Recyclable

* Rating based on average colour formulations

Attributes

- Fine-grain finish
- Superior flexibility
- Water-repellent compound with water-drop effect
- High CATAS-tested chromatic uniformity
- 5 colour collection
- Easy to clean and maintain
- Suitable for underfloor heating systems
- Can be recycled as mineral inert material, avoiding waste disposal costs and environmental impact
- Naturally antibacterial

Innovative hybrid technology.

Areas of application

High-performance grouting of joints from 0 to 20 mm, with smooth finish, high degree of hardness, water-repellence with water-drop effect.

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.

Intended use: - internal and external flooring and walls, in domestic, commercial and industrial applications and street furniture, in environments subject to heavy traffic, also in areas subject to thermal shock and freezing - swimming pools, tanks and fountains - underfloor heating systems.

Do not use on joints more than 20 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

- 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 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, ambient weather conditions and on the level of absorption of the covering and the substrate. **WARNING:** 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.

Joints must be free from any excess adhesive or mortar, even if already hardened, and must be of an even depth of at least 2/3 of the overall 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 tiles should be dampened prior to grouting the joints, in order to prevent any water stagnation.

Before grouting with contrasting colours to the tiles, make sure they can be cleaned. It is advisable to perform a preliminary test on tiles not to be laid.

Preparation

Prepare Fuga-Pave Flex CH in a clean container, first of all pouring in a quantity of water equal to approximately 3/4 of the amount required. Gradually add Fuga-Pave Flex CH 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 Fuga-Pave Flex CH is immediately ready for use. Mix a quantity to be used within 60 min. at +23 °C 50% R.H. The amount of water to be added, indicated on the packaging, is an approximate guide and will vary depending on the different colours. It is possible to obtain mixtures with consistency of variable thixotropy according to the application to be made. 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

Fuga-Pave must be applied evenly on the tile covering with a spreader or hard rubber float. Grout material has to be completely filled between entire joint areas, the application has to be done diagonally with respect to the joints. Remove most of the excess grout immediately, leaving only a thin film on the tile.

Cleaning

Begin cleaning the tiles when the grout is touch dry 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 emulsify 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 using Fuga-Pave Flex CH to grout joints in large surface areas, use suitable electrical equipment to increase application speed and cleaning times. In particular, cleaning with electric sponge machines 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.

It is recommended to use materials from the same production batch throughout.

Approved for marine use.

Certificates and marks

- ANSI
- 118.7 13007-3
- MEETS OR
- EXCEEDS CG2 WA
- S-P-01208

TECHNICAL DATA*

- Appearance - coloured pre-mixed
- Apparent volumetric mass $\approx 1.22 \text{ kg/dm}^3$ UEAtc/CSTB 2435
- Average granulometric composition $\approx 70 \mu\text{m}$
- Mixing water: - 3 kg bag $\approx 0.7 \text{ l}$ / 1 bag 3 kg - 20 kg bag $\approx 4.5 \text{ l}$ / 1 bag 20 kg
- Shelf life: - 20 kg bag ≈ 12 months in the original packaging in dry environment
- Specific weight of the mixture $\approx 1.86 \text{ kg/dm}^3$ UNI 7121
- Pot life ≥ 50 min.
- Temperature range for application from $+5 \text{ }^\circ\text{C}$ to $+35 \text{ }^\circ\text{C}$
- Width of joints from 0 to 20 mm
- Grouting after laying: - with adhesive see characteristics of adhesive –
 - mortar $\approx 7 - 14$ days
 - Foot traffic ≈ 3 hrs
 - Foot traffic at $+5 \text{ }^\circ\text{C} \approx 10$ hrs
 - Foot traffic at $+35 \text{ }^\circ\text{C} \approx 2$ hrs
 - Interval before normal use ≈ 24 hrs
 - Ready for use at $+5 \text{ }^\circ\text{C} \approx 3$ days
 - Ready for use at $+35 \text{ }^\circ\text{C} \approx 8$ hrs
 - Ready for use in swimming pools ≈ 3 days

PERFORMANCE*

VOC Indoor Air Quality (IAQ) - Volatile organic compound emissions

- Conformity EC 1 GEV-Emicode GEV certified 9522/11.01.02
- HIGH-TECH Flexural strength after 28 days $\geq 2.5 \text{ N/mm}^2$ EN 12808-3
- Compressive strength after 24 hrs $\geq 15 \text{ N/mm}^2$ ISO 13007-4.1.4
- Compressive strength after 28 days $\geq 15 \text{ N/mm}^2$ ISO 13007-4.1.4
- Resistance to frost-thaw cycles: - flexural $\geq 2.5 \text{ N/mm}^2$ EN 12808-3 - compressive $\geq 15 \text{ N/mm}^2$ EN 12808-3
- Resistance to abrasion after 28 days $\leq 1000 \text{ mm}^3$ EN 12808-2
- Water absorption after 30 min. $\leq 2 \text{ g}$ EN 12808-5
- Water absorption after 240 min. $\leq 5 \text{ g}$ EN 12808-5
- Colour Fastness see colour chart UNI EN ISO 105-A06
- Resistance to fungal contamination class F+ CSTB SB-2018-144
- Resistance to bacterial contamination class B+ CSTB SB-2018-142
- Working temperature from $-40 \text{ }^\circ\text{C}$ to $+90 \text{ }^\circ\text{C}$ Conformity CG2 WA ISO 13007-3

*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.

WARNING

- Product for professional use
- 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 Tilers Tools, 01565 344860, sales@tilerstools.co.uk