G100 Flex

by GECOL

Adhesive-gel monocomponent, deformable and high performance

Everything is possible

MULTISUPPORTS:

- Cement rendering.
- Cementitious flooring.
- Precast or poured concrete on site.
- Deformable plates of laminated plaster.
- Concrete blocks.
- Cementitious flexible waterproofing.
- Plaster supports.
- Cement and / or lime plasters.
- Fibre cement plates.
- Ceramic brick large format.
- Pre-existing ceramic, terrazzo, mosaic and natural stone floor and wall tiles.
- Substrates made of gypsum plaster, plaster, anhydrous plaster, perlite plaster and similar materials.

MULTIPERFORMANCE:

- With powder consolidating structural fibres.
- Thixo-fluid consistencies.
- Variable rheology.
- No variation in structural volume after setting (no shrinkage).
- Up to 15 mm thick.
- High traffic, commercial, industrial and street furniture pavements.
- Exterior cladding.
- Ceramic overlay without applying an adhesion primer.
- Heated and refrigerable floor and wall tiles.
- Surfaces under immersion (swimming pools, fountains, spa, etc.).

MULTIFORMATS:

- Natural and artificial reconstituted stones.
- Marbles, granites, limestones, etc.
- Porcelain stoneware.
- Laminated stoneware.
- Ceramic pieces without absorption.
- Vitreous mosaic.
- Large format ceramic tiles.
- Cooked clay, clinker.

COMMISSIONING REQUIREMENTS

The indications for use refer, where provided, to Standard **UNE 138002**, in effect since February 2017: "General rules for the execution of cladding with ceramic tiles by adhesion". Following always the specifications and applications of this.

Other uses or other applications not described in said Standard will not be considered within the product warranty.

Before using this adhesive, we recommend consulting the user manual.

The data provided in this technical documentation have been obtained under standard laboratory conditions, so they may vary depending on the on-site installation and on the specific weather conditions, which are beyond our control.

The marking of this product is fixed in accordance with the provisions established in the **UNE EN 12004** Standard and exclusively under the conditions that it indicates for the technical analysis and continuous verification of the regularity of the product.

GECOL guarantees the perfect performance of its auxiliary products to the indicated situations.

Materials from other brands or situations not described may affect the physical and aesthetic properties of our products

MODE OF USE

Before getting started

- In pavements with radiant heating, it is recommended that it be disconnected 24 hours before.
- During application, prevent water from penetrating between the substrate and the piece and provide for final protection with cornices, water drains, etc.
- Check that the tile does not have any dust, dirt or poorly attached layers.
- It is not necessary to wet the tile before laying. Only in the case of very dusty reversals is it advisable to wash with clean water.
- In facade cladding with large format tiles, use the double buttering technique.
- For overlaying tiles, apply to toothed trowel, with double buttering, adhesive thicknesses less than 7 mm and a prior cleaning of the support.
- For the application on plaster supports (or similar nature), the technique of toothed trowel and adhesive thicknesses less than 7 mm should be used.
- To avoid the appearance of eyebrows, it is convenient to use homogeneous adhesive thicknesses.
- In case of the use of ceramic tile leveling systems, the double buttering technique is mandatory.
- Respect joints between 3 mm pieces indoors and 5 mm outdoors.
- The use of ceramic tile leveling systems does not exempt the use of crosspieces in the execution.
- With tiles greater than 60 x 40 cm or 40 kg / m^2 in coatings, use a mechanical anchor of all the parts attached to the base support.
- Depending on the size format of the tile to apply, we recommend the use of different trowels, as shown in the table:

Notched trowel table

Tile format	Notched trowel	Adhesive method
< 100 cm^2	U4 (4x4x4)	Simple buttering
< 450 cm^2	U6 (6x6x6)	Simple buttering
900 cm^2	U6 (6x6x6) / U9 (9x9x9) ó Ω10	Double / Simple buttering
> 900 cm^2	U9 (9x9x9) ó Ω10	Double buttering

- If in doubt, always consult our Technical Department.

Substrate preparation

- As a general rule, all substrates must be: sturdy, clean, stable, rough, flat, with some degree of moisture and absorption and totally set-up (hardened)
- On porous substrates or in warm weather, the substrate must be previously moistened and you must wait for the film of water to disappear
- Substrate types and conditions:

A_Cement mortar substrate:

Solid and clean with excellent resistance with all mortar retraction complete.

When applying via mechanical projection, wet down several times two days afterwards to prevent drying out. Apply a floated finish in all cases.

B_Concrete substrate:

Solid and clean with excellent resistance with all concrete retraction complete.

Prevent all surface grout and/or release agents by cleaning mechanically or washing with **GECOL Desincrustante**.

Rinse with clean water and let dry.

C_Terrazo substrate:

Check the strength of the old terrazzo tiles.

Wash beforehand with **GECOL Desincrustante.**

Rinse with clean water and let dry.

D_Ceramic brick substrate:

Solid, clean, stable and have all shrinkage completed.

E_Gypsum substrates (not stable) plaster and anhydrite:

Solid, clean, stable and have all retraction completed.

Permissible residual maximum humidity 0.5%.

Pre-apply a coat of primer with **GECOL Primer–TP**

(diluted 1:3) to reduce water absorption, harden the surface and facilitate the adhesive spreading.

Remove dead plasters or have received a thin layer of final plaster.

F_Stoneware tile support (indoors only):

Solid and well attached.

Wash beforehand with **GECOL Desincrustante**.

Clean them with water and detergents.

Then rinse and let dry.

G_High-absorption substrates:

We recommend the application of a coat of **GECOL Primer-TP** (diluted 1:3) to reduce water absorption, harden the surface and facilitate the adhesive spreading.

Preparation of the mix

- Mix the product with clean water until you have smooth and lump-free paste.
- Let it rest and then mix the paste again.
- The amount of water indicated on the packaging is a guideline and may vary by a small percentage depending on the geographic region where production takes place.
- Being a gel adhesive with variable rheology, more or less thixotropic mixtures can be obtained depending on the application to be performed.
- Adding excess water can cause the thickness to be reduced due to shrinkage during the plastic phase of drying, reducing its ultimate performance, as well as result in a poorer application of the adhesive.

Application

- Apply **G100 Flex** on the substrate.
- Align the tiles with the use of spacers.
- Screed the thickness with a notched trowel chosen based on the format of the ceramic tile and the flatness of the substrate, ensuring that the back of the tile is thoroughly wetted.
- For good adhesion, we recommend that a thin layer of **G100 Flex** be applied on the substrate using the flat side of the trowel, followed by the application of the desired thickness of the adhesive using a notched trowel suitable for the tile type and format (consult notched trowel table).
- Use the double buttering technique in cases such as those involving large-format pieces, flooring subject to heavy loads, materials to be polished, etc.
- Apply the tile and tap it with a rubber mallet until the mark or groove left by the notched trowel is broken, periodically checking the stickiness of the plaster (lifting up the tile already installed).

  Correct wetting is obtained by displacing the tile in a direction perpendicular to the grooves a distance equivalent to the width of the trowel tooth and in the opposite direction to the adjacent tile, adjusting its location subsequently by moving the tile to its original position.
- Under normal temperature and humidity conditions, **G100 Flex** has an open time of 30 minutes.

  However, bad weather (strong sunshine, a drying wind, high temperatures) and a highly absorbent substrate could significantly reduce this time.
- The adhesive should be checked regularly to ensure there is no skinning of the adhesive and that it is fresh.
- Otherwise, it should be re-combed with a notched trowel, but never wet the adhesive.

Grouting

- Sealing joints is done with specific materials of the **GECOL Junta** range.
- When a good chemical resistance is required, use anti-acid epoxy compounds such as **GECOL Epoxi**.
- Take care to preserve movement joints on any structural joint the building has.
- Perimeter movement joints in corners and changes in plane, height or material.
- Movement joints that constitute maximum surface areas of 50 m^2 indoors, 25 m^2 outdoors and 16 m^2 with dark colours on exterior surfaces.
- All movement joints should be filled with elastic mastic like **GECOL Elastic-MS**.

LIMITS OF USE

Do not use:

- On metal, plastics or concrete coated with a thin sealing film lacking optimal consistency.
- Do not apply if the substrate has a moisture content above 3%.
- On gypsum supports, the size of the pieces must not exceed 2,000 cm^2.
- Do not use the adhesive as filling material for irregularities greater than 15 mm.

CLEANING

Clean any residue on the tools and coated surfaces with water before the product hardens.

TECHNICAL DATA

Coverage

Simple buttering technique: +/- 3.0 – 3.5 kg/m^2

Back buttering technique: +/- 5.0 – 5.5 kg/m^2

Supply

Packages: 25 kg plasticised paper bags and high-quality.

Colours: grey and white

Product

Composition: hydraulic binders, selected mineral aggregates, structural fibres, selected nanotechnological additives and plastic copolymers.

Apparent density of powder: 1.20 +/- 0.10 kg/litres.

Storage

24 months from date of manufacture in a sealed package and protected from the weather.

Application

Mixing water:
- Thixotropic consistency: 7.25 – 7.75 litres/25 kg approx.

- Fluid consistency:	8.0 – 8,75 litres/25 kg approx.
Pot life of the mix:	over 3 hours.
Open time:	30 minutes.
Stand time:	5 minutes.
Grouting:	after 24 hours on façade coverings and 48 hours on flooring.
Traffic bearing:	24 to 48 hours after grouting (depending on weather conditions).
Surface polishing:	after 14 days.
Thickness for tile application:	from 3 to 15 mm.
Application temperature:	from +5º C to +35º C (measured on the substrate).

Ultimate performance

Slippage:	≤ 0.5 mm.
Deformability:	≥ 2.5 mm.
Working temperature:	from -30 ºC to +60 ºC.
Initial adhesion strength:	greater than 1.0 N/mm^2
Adhesion after water immersion:	greater than 1.0 N/mm^2
Adhesion after heat ageing:	greater than 1.0 N/mm^2
Adhesion after a freeze-thaw cycle:	greater than 1.0 N/mm^2
Reaction to fire:	Euroclass F.

Safety data

DANGER

GHS07 GHS05

Hazard

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

Precautionary

P102 Keep out of reach of children.

P103 Read label before use.

P261 Avoid breathing dust.

P280 Wear protective gloves / protective clothing / eye protection / face protection.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy. Continue rinsing.

P310 Immediately call a **POISON CENTER** or doctor.

P501 Dispose of contents / container in accordance with current legislation waste treatment.

1999 /45 / EC The product contains Chromium VI reducer, declared the period of effectiveness is indicated on the packaging.