

Forcol®

FLEXIGEL

Cementitious adhesive C2TE

WHITE GREY **20 Kg**

FORCOL FLEXIGEL is a cement-based adhesive with excellent workability, suitable for installing tiles on large floor areas, high-traffic surfaces, and over existing flooring.

COMPOSITION

FORCOL FLEXIGEL is formulated with white cement, selected aggregates, organic and inorganic additives, and resins that improve workability, water retention capacity, and product adhesion.

APPLICATION

FORCOL FLEXIGEL is a cement-based adhesive with excellent workability, specially designed for installing ceramic tiles, porcelain stoneware, marble, stone, or similar materials of small or large format, whether absorbent or non-absorbent, on large surface floors, both indoors and outdoors, high-traffic floors, and over existing flooring.

PROPERTIES

- Product subjected to rigorous quality control.
- Complies with Spanish and European standards (UNE, EN).
- Guaranteed homogeneity, manufactured in facilities with advanced dosing and weighing systems.
- Easy to apply.
- High adhesion to the substrate.
- Excellent water retention.
- Gel-like appearance with high consistency and low viscosity for easier application.
- Outstanding workability.

SUITABLE SUBSTRATES

- Concrete floors and cement-based surfaces, both interior and exterior plastered coatings.

SUBSTRATE CONDITIONS:

- Must be strong and free of dust, grease, paint, water repellents, antifreeze, etc.
- Remove degraded or loose areas.
- Check flatness with a 2-meter straightedge; deviations must be less than 5 mm. Level with the same product 48 hours before installation. For thicknesses over 10 mm, use traditional mortars.
- Do not apply on metal or wood surfaces.
- Do not apply on substrates with moisture above 3%.
- For other substrates or doubtful adhesion, consult our Technical Department at +34 964 343 300 or email comercial.forcol@origenmateriales.es.

COVERAGE

Approximate consumption:

- 4.0 - 4.5 Kg/m² for single bonding.
- 6.5 - 7.0 Kg/m² for double bonding.

Flatness variations may affect consumption.

PRESENTATION

FORCOL FLEXIGEL is a powdered product and is marketed in:

- 20 Kg bags with multi-layer paper and moisture-proof film.
- Pallet: 1440 Kg (72 bags), shrink-wrapped for rain protection.
- Color: White or grey (indicated on all sides of the bag).

STORAGE

12 months from manufacturing date in original sealed packaging, stored in a cool, dry, and ventilated place.

NOTES

All products undergo quality control in our lab and certified labs. For inquiries about new products or technical advice, contact our design department at:

- Phone: +34 964 343 300
- Email: comercial.forcol@origenmateriales.es.

WARNING

This information is based on our tests and experience. Recommendations do not imply any warranty, as application conditions are beyond our control. Users must ensure the product is suitable for their intended use and are advised to conduct a detailed evaluation before large-scale application.

INSTRUCTIONS FOR USE

1. Mix FORCOL FLEXIGEL with approx. 28 ±1% water (5.4 – 5.8 liters per 20 Kg bag).
2. Stir manually or mechanically until a homogeneous, lump-free mixture is obtained (use a slow electric mixer at 500 rpm).
3. Let the mixture rest for 5 minutes, then homogenize again.
4. Use full bags for consistent mortar properties, adding the same amount of water and mixing simultaneously.
5. Spread FORCOL FLEXIGEL on the substrate with a notched trowel in small sections from bottom to top. Ensure the mortar ridges maintain their shape.
6. Place ceramic pieces and press with a vertical motion until ridges collapse for uniform distribution. For tiles with smooth backs or deep grooves, apply adhesive on the back as well..

APPLICATION PRECAUTIONS

- Respect the mixing water ratio; failure to do so may cause shrinkage and poor adhesion of the cement adhesive. If the product hardens, simply remix it to restore its original plasticity.
- Under extreme conditions (especially high temperatures or strong winds), check that no surface film has formed on the cement adhesive. This film reduces adhesion; remove it by re-combing the adhesive. Never moisten with water, as this creates an anti-adhesive layer.
- Protect ceramic coverings from expansion and contraction with proper joint treatment.
- During installation, avoid water penetration between the substrate and the tile, and ensure final protection with cornices, drip edges, etc.
- Wind reduces the open time of the cement adhesive, resulting in poorer adhesion.
- Do not use when standing water is present.
- Use double bonding for formats where at least one side exceeds 30 cm in length. For sizes larger than 60×40 cm or weights over 40 Kg/m², mechanical anchors are recommended.
- When installing, press the tiles firmly to achieve full bedding and avoid gaps between tiles and substrate.
- On façades, create expansion joints as well as perimeter joints at cornices, slab edges, etc., and respect the building's structural joints.
- Periodically check the tackiness of the adhesive by lifting a previously placed tile.
- This is an installation system where labor and substrate play a fundamental role; precautions must be taken and material usage conditions strictly observed.

TECHNICAL DATA:

Classification: UNE-EN 12004	C2TE
Mixing water:	28 ± 1%
Application temperature:	5 - 30 °C
Powder density:	1,4 ± 0,05 Kg/L
Paste density:	1,6 ± 0,05 Kg/L
Initial adhesion:	≥ 1 N/mm²
Adhesion after water immersion:	≥ 1 N/mm²
Adhesion after heat aging:	≥ 1 N/mm²
Adhesion after freeze-thaw cycles:	≥ 1 N/mm²
Slip:	≤ 0.5 mm
Extended open time adhesion (30 min):	≥ 0,5 N/mm²
Open time:	30 minutes
Adjustment time:	≤ 30 minutes
Pot life:	90 minutes
Grouting time:	24 hours
Walkability:	48 hours
Final service:	14 days
Rest time after mixing:	5 minutes
Max thickness:	10 mm
Fire reaction:	Class A1

GENERAL DATA TABLES:

The following tables indicate the maximum tile dimension (longest side) permitted for the application of the adhesive, in accordance with the UNE 138002:2023 standard.

FLOOR COVERINGS

Type of substrate	Interior floors residential and public	Interior floors commercial or industrial subject to mechanical stress	Exterior floors	Criterion
Cement screed or calcium sulfate (anhydrite) base[1] without underfloor heating	≤ 120	≤ 90	-	Length of the longest side of the tile (cm)
Cement screed or calcium sulfate (anhydrite) base[1] with underfloor heating	≤ 30	≤ 30	-	
Directly on compacted fill / compacted layer / concrete slab	≤ 60	≤ 30	≤ 30	
Existing floor covering (ceramic tiles / mosaic / terrazzo / natural stone)	≤ 90	≤ 60	-	
Cement screed	-	-	≤ 30	

[1] Calcium sulfate (anhydrite) based screeds require the prior application of an adhesion primer.

WALLS AND CEILINGS

Substrate type	Interior walls and ceilings	Exterior walls and ceilings	Criteria
Lime/cement or gypsum render[1] without integrated heating	≤ 120	-	Length of the longest side of the tile (cm)
Lime/cement or gypsum render[1] with integrated heating	≤ 30	-	
Gypsum plasterboards	≤ 60	-	
Directly onto concrete	≤ 60	-	
Existing covering (ceramic tiles / mosaic / hydraulic tiles / natural stone)	≤ 60	-	
Cement-based or fiber cement panels	≤ 90	-	
Large-format ceramic blocks	≤ 120	-	
Wood substrates	≤ 30	-	
Cement/lime render	-	≤ 30[2]	

[1] Gypsum-based renders require prior application of a bonding primer.

[2] For skirting applications up to a height of 1.5 m.

GENERAL DATA TABLES:

CERAMIC TILE COVERINGS

Substrate Type	Ceramic Tile without Fibre ≤ 60 cm	Ceramic Tile without Fibre > 60 cm	Ceramic Tile with Fibre ≤ 60 cm	Ceramic Tile with Fibre > 60 cm
Interior Floors and Wall Coverings	Yes	-	-	-
Coverings over plasterboard / fibre cement panels	-	-	-	-
Exterior floors and interior floors with radiant heating	-	-	-	-
Facades	-	-	-	-
Swimming Pools	-	-	-	-
Coverings over membranes or waterproofing systems	Given the wide range of cases, follow the manufacturers' specifications.			
Highly Deformable Substrates (metal, wood, etc.)	-	-	-	-

Yes: permitted application.
-: not recommended or not applicable.

POOL TILE COVERINGS

Pool type / substrate	Pool type	Intermediate layers	Length of the longest side of the tile (cm)
Reinforced concrete, shotcrete (gunite) concrete or brickwork.	Swimming pool shell	Cement-based render / screed	≤ 30
Reinforced concrete, shotcrete (gunite) concrete or brickwork.	Swimming pool shell	Liquid-applied waterproofing system cement-based	≤ 30

Note: the intermediate layers indicated (cement-based render/screed or liquid-applied cementitious waterproofing) must comply with the technical requirements applicable to the substrate and the use in pools.

Forcol® Simetría

ÉMISSIONS DANS L'AIR INTÉRIEUR* A+

* Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentat un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).

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