

FLEXO

Improved cementitious adhesive with extended open time for vitrified materials.



Technical data

Powder adhesive based on cements, selected grain size aggregates, synthetic resins and additives. Featured by an excellent adhesiveness on vitrified surfaces and by a medium deformability. Suitable for the indoor and outdoor installation on traditional cementitious substrates such as screeds and renders.

Classification according to EN 12004, class C2TE.

Applications

Indoor and outdoor installation on traditional cementitious renders and screeds of any ceramic tile: medium-sized porcelain stoneware, terracotta, single and double fired.

Important warnings

Do not use in the following cases:

- on wood and wood composition panels (use ADEFLEX T).
- On metal, PVC, rubber or linoleum surfaces (use ADEFLEX T).
- For the installation of glassy mosaic (use B75 SPECIAL + LATEX EL 300 or B75 MONOCOLOR).
- For the installation of tiles or natural stones requiring an adhesive thickness over 5 mm (use EXTRA 30 MAXI).
- Whenever the floor must be ready for traffic quickly (use EXTRA 40 RAPIDO or ADEFLEX GREEN S1 RAPID or EXTRA 30 FAST or ADEPROOF RAPIDO).
- On prefabricated or cast concrete structures.
- On walls or floors subject to significant movements or vibrations.
- For the installation on gypsum walls, ready gypsum-based renders and anhydrite screeds, apply a coat of PRIMER GS before the adhesive.

For any topic not treated herein please see Norm UNI 11493 and/or contact our technical service.

Mix preparation

Mix 6.0 - 7.0 l of clean water with a 25 kg bag of FLEXO, preferably by mechanical stirrer with low speed, till getting a smooth and clogless mix with the wished viscosity. The mix must then rest for about 10 minutes, stirring it shortly again before using it. The adhesive prepared in this way has a use time of 6 - 8 hours.

Preparazione del sottofondo

The substrate for the tiling must comply with the requirements of ageing, integrity, mechanical and surface resistance, dimensional regularity, humidity and absence of contaminating agents according to Norm UNI 11493 sect. 7.3 when the adhesive is applied.

Cementitious screeds: the surfaces must be free of stagnant water before the installation. Traditional cementitious substrates must be suitably cured (28 days at a temperature of +23°C and R.H. 50%). Screeds prepared with STARCEM or STARCEM PRONTO must be made at least 48 hours before the installation (see technical sheets). Substrates must be flat, dimensionally and mechanically solid, suitably resistant according to the final use, without crumbling parts and oils, paints, waxes and anti-adhesive materials. Substrates must be sufficiently dry: the adhesive can set more slowly with damp.

Such substrates must anyway comply with the requirements of Norm UNI 11493 point 7.6.

Renderers: renders must be cured for at least one week for every thickness cm. Substrates must be flat and mechanically solid, suitably resistant according to the final use, without crumbling parts and oils, paints, waxes and anti-adhesive materials. Substrates must be sufficiently dry: the adhesive can set more slowly with damp.

NOTE Gypsum or anhydrite substrates must be dry (residual moisture below 0.5%), sufficiently resistant, with suitable surface (otherwise sand/roughen them), free of dust and treated with PRIMER GS. Such substrates must anyway comply with the requirements of Norm UNI 11493 point 7.6.

Indoor installation on existing tiles: FLEXO is indicated for the indoor installation of medium-sized porcelain stoneware tiles overlapped on existing ceramic floors. Check that all the existing tiles are properly bonded; clean and prepare the surface of the old floor carefully by a first washing with a suitable basic detergent, then wash with ADESIT CLEAN. Mechanically remove all loose parts and materials not enabling a proper bonding. For outdoor installation on existing ceramic floors, also treat the surface with ADEGRIP ECO besides following the instructions above.

Please refer to norm UNI 11493 for this particular application.

Installation of ceramic tiles on cementitious screed with heating: it is important for this application that the screed and the heating/cooling system have been designed, built, tested and started according to the instructions of norm UNI EN 1264. Before starting the installation operations with adhesive also refer to all the specifications and checks indicated in the norm UNI 11493 for this special application.

Tile application

For a correct application of FLEXO initially apply a first coat of adhesive with a smooth squeegee, then apply the adhesive with a notched trowel suitable for the thickness to be obtained, for the substrate roughness and for the tile type to be applied. After installing the tile, press carefully, so that its back side is completely wetted. Special weather conditions, such as strong wind, high temperatures, beating sun or very absorbing substrates can significantly reduce the open and adjustment time. It is recommended to dampen the substrate before applying the adhesive to reduce this problem. Anyway, before the installation check if the adhesive has formed a film. In this case, spread again the adhesive to re-activate the bonding. Absolutely avoid pouring water on the adhesive already forming a film, as this would form an anti-adhesive coat. On outdoor floors or walls, in particular when the tile back side is structured or "dovetail" type (klinker, terracotta, etc.), spread the adhesive also on the tile back side so as to avoid cavities where water can penetrate or where condensate moisture can form, as this could cause detaching or breaking in case of frost.

The installation must always comply with Norm UNI 11493.

Fugatura

Tiles can be grouted after 4-8 hours on the walls and after 24-36 hours on the floors.

For this purpose, and depending on the thickness, it is recommended to use ADESITAL joint sealants:

- FUGAMAGICA 0-4 for wall grouting with joints smaller than 4 mm, with a fine finishing.
- FUGAMAGICA ZEROSEI MATERIA for wall water-repellent grouting with joints smaller than 6 mm, with a smooth finishing.
- FUGAMAGICA 2-12 for wall and floor grouting with joints from 2 to 12 mm, with a medium finishing.
- FUGAMAGICA 3-20 BIO for wall and floor grouting with joints from 3 to 20 mm, with a coarse finishing.
- ADEPOXY two-component acid-resistant epoxy grout for wall and floor grouting with min. 3-mm wide joints.
- ADEPOXY MATERIA two-component decorating epoxy grout for wall and floor grouting with min. 2-mm wide joints.
- If higher resistance, deformability and waterproofing are required, totally replace the water with the latex IMPER 21 mixed with the FUGAMAGICA sealants.
- Flexible expansion joints must be made with ADESIL MATERIA for ceramic and SP 308 for natural stones (see technical sheets). Expansion joints on floors subject to heavy traffic must be made with SILFLEX P.

Specifications

Vitrified material wall and floor tiles shall be installed on cementitious substrate with a single-component powder adhesive with mixed binder, e.g. FLEXO by ADESITAL S.p.A.

Technical data (at +23°C and 50% R.H.)	
Appearance	powder
Colour	white and grey
Powder volume mass	1.25 g/cm ³
Storage	12 months (in the original packaging and in a dry
Safety	Please check the information on the package and on the Safety Sheet
Application data	
Mixing ratio	6.0 - 7.0 l of water every 25 kg bag
Pot life	6 - 8 hours
Mix volume mass	1.5 g/cm ³
Application temperature	from +5°C to +35°C
Mix pH	> 12
Open time	30 minutes
Adjustment time	60 minutes
Ready for traffic	after 24 - 36 hours
Wall grouting	after 4 - 8 hours
Floor grouting	after 24 - 36 hours
Final hardening	14 days
Final performance	
Initial adhesion	1.0 N/mm ²
Adhesion after heating	1.0 N/mm ²
Adhesion after immersion in water	1.0 N/mm ²
Adhesion after frost-thaw cycles	1.0 N/mm ²
Deformability	average
Resistance to humidity	excellent
Resistance to ageing	excellent
Resistance to solvents and oils	good
Resistance to alkali	good
Resistance to acids	poor
Coverage	Small and medium sizes: 2.0 – 3.0 kg/m ² Large sizes, terracotta, klinker: 4.0 kg/m ² and over
FLEXO packages	25 kg bag

Warning: The above indications and rules correspond to our best experience, but shall be deemed as merely indicative and shall be confirmed by exhaustive practical tests; thus, before using the product, the operator shall determine if it is suitable for its intended use and shall undertake every responsibility resulting from its use. PROFESSIONAL USE ONLY.