
Litotex

Technical Specifications



Anti-crack decoupling membrane in rolls for the installation of floor and wall coverings made of ceramic tiles, porcelain stoneware and natural stone, including removable ones

Product description

Litotex is an anti-fracture decoupling membrane supplied in rolls for the installation of floor and wall coverings in ceramic tiles, porcelain stoneware and natural stone, including removable, anti-fracture types. It consists of two outer layers of non-woven fabric, which ensure maximum adhesion, laminated and reinforced internally with a fibreglass mesh to absorb the movements and stresses generated between the substrate and the covering.

Designed for the installation of floors in ceramic tiles, porcelain stoneware and natural stone – including removable tiles – it is quick and easy to apply on site and ensures maximum installation safety.

Thanks to the exclusive microstructure of the surfaces, up to 50 per cent less adhesive is required for the subsequent installation of the cladding compared to traditional embossed membranes, and it maintains its performance even in very low temperatures.

It is ideal for laying new floor coverings on cracked and problematic substrates, as the product can be applied over existing flooring consisting of ceramic tiles or natural stone, thereby avoiding extensive and costly demolition and disposal work.

Certifications

EC1 Plus Gev Emicode
A+ Indoor air emissions

Substrates

Screeds
Self-levelling compounds
Levelling Compounds
Existing tiles
Plaster
Concrete and reinforced concrete (waterproofing only)
Plaster and anhydrite
Fibre-cement sheets

Uses

Interiors
Floors – walls
Overlay
Terraces and balconies
SPA and Hammam
Indoor wet areas (bathrooms, showers)
Industrial flooring
Facades
Residential, public, commercial building

Limitations

Do not use outdoors
In applications exposed to foot traffic and abrasion, cover with suitable protection systems against direct abrasion until the tiling is laid
Do not apply to wet surfaces, damp substrates (> 5% moisture content) or those subject to rising damp
Do not apply if there is condensation on the surfaces
Do not apply to uneven or excessively rough substrates. Apply a skim coat with HydroLevel®
Do not use where negative hydraulic pressures are present
Do not use on wood surfaces that are not moisture-resistant
Do not leave the product exposed. Always provide a covering of ceramic tiles, natural stone or mosaics
Do not apply the product to bituminous membranes, rubber substrates or substrates treated with resins
Refer to national standards, such as UNI 11493

Product specifications

Appearance	Composite fabric
Composition of the material (external)	Polypropylene non-woven fabric
Composition of the material (internally)	Fibreglass mesh
Colour	White
Roll length	50 m
Roll width	1 m
Thickness	0.85 mm
Weight	235 g/m ²
Waiting time before laying the covering	Immediate
Customs heading	70195900
Shelf life	Unlimited in the original packaging in a dry place

Technical

Physical properties		
Longitudinal breaking load	> 900 N/50 mm	DIN EN ISO 527-3

Specifications

Lateral breaking load	> 900 N/50 mm	DIN EN ISO 527-3
Adhesion strength	0.22 N/mm ²	DIN EN 1348
Shear adhesion	≥ 1.0 N/mm ²	ANSI A-118.1
Longitudinal elongation at break	< 15%	DIN EN ISO 527-3
Lateral elongation at break	< 15%	DIN EN ISO 527-3

Chemical resistance

Active ingredient		(+ = resistant / 0 = weakened / - = not resistant)
3% hydrochloric acid	+	Internal method
35% sulphuric acid	+	Internal method
Citric acid 100 g/l	+	Internal method
5% lactic acid	+	Internal method
3% potassium hydroxide	+	Internal method
20% potassium hydroxide	or	Internal method
Sodium hypochlorite 0.3 g/l	+	Internal method
Salt water (20 g/l seawater)	+	Internal method

Preparation of substrates

In accordance with standard UNI 11493-1, substrates and coatings based on concrete, cement and plaster must be adequately cured and must not show signs of excessive moisture emission, condensation, efflorescence or hydrostatic problems. Substrates must be mechanically sound and free from loose particles, grease, oil, paint, wax and rising damp. Cement-based plasters must be allowed to cure for at least one week per centimetre of thickness. Cement-based screeds must have a total curing time of at least 28 days or be laid using the innovative X-Floor® and X-Floor® Pro anti-crack screeds. Surfaces that are particularly dusty, porous and absorbent can be treated with X-Prime®, an innovative fixative and consolidant. Smooth, compact substrates, such as old ceramic tiles or terrazzo, must be treated with the specific detergent X-Cleaner® Scrub. In the case of anhydrite screeds, ensure that a suitable vapour barrier is in place to prevent any rising damp. Check using a carbide hygrometer that the residual moisture content is less than 0.5% and 0.3% for underfloor heating screeds. In any case, the respective technical data sheets must be consulted for correct use of the indicated products.

Application

The choice of adhesive used to bond the membrane to the substrate must be based on the type of substrate itself; for most substrates, use high-performance gels based on Litokol's proprietary technology or Class C2 adhesives in accordance with UNI EN 12004. For guidance on selecting the correct adhesive, please refer to the product data sheets. Apply the gel to the substrate using a suitable notched trowel (generally 6 mm is recommended); position the membrane, which has been cut to the required length, within the gel's open time, and press it down using a smooth trowel with rounded edges or a specific membrane-pressing roller, working from the centre outwards to expel any excess adhesive and prevent the formation of creases or bubbles. The sheets must be laid side by side. After installation, immediately protect the surface of the membrane from frequent foot traffic and direct abrasion using wooden boarding or panelling. Always refer to the relevant technical data sheets for the correct use of the products.

Flooring installation

The installation of ceramic tiles, natural stone or mosaics shall be carried out using high-performance gels based on Litokol technology, which guarantee complete force transfer, consistent system performance and total safety. To ensure perfect adhesion of the adhesive gel to the HydroProof Anti-Fracture membrane, apply a thin, even coat of the mixture using the smooth side of the trowel and, immediately afterwards, apply the desired thickness using the notched side. In accordance with the UNI 11493-1 standard, use the double-coating technique, applying the gel to the back of the tiles as well to ensure they are fully saturated during installation in areas where the substrate may be subject to movement or expansion, outdoors, in swimming pools or in areas subject to particularly high stress. In accordance with the UNI 11493-1 standard, tiles must be laid with joints of a width appropriate to their size (minimum 2 mm). For grouting in swimming pools, outdoors and in damp areas, we recommend using Starlike® Pro or Starlike® Easy. Take account of any partition or structural joints and provide suitable expansion, partition and perimeter joints.

Warnings

The decoupling membrane should ideally be installed and the adhesive allowed to cure in the shade; if immediate covering or tiling is not possible, the installed decoupling membrane must be covered with reflective films, such as a white non-woven fabric (the greater the distance between the installed membrane and the protective film, the better the effect and the more significantly the surface temperature is reduced).

The decoupling membrane must be pressed down immediately after application; the tile adhesive must be protected from premature skin formation; the use of X-Primer, a trowel with suitable teeth and an extended open-time (E) adhesive optimises this working window.

The membrane must be stored out of direct sunlight in the room where it is to be installed for at least 24 hours prior to laying.

Do not use for applications not listed on this technical data sheet

For further information, please contact Litokol's Technical Customer Service on +39-0522-622811 or via customercare@litokol.com

Safety Information

For the safe use of our products, please refer to the latest version of the Safety Data Sheet, available at www.litokol.com

PRODUCT FOR PROFESSIONAL USE

Legal notices

The information and specifications set out in this technical data sheet are based on our best experience. However, as we are unable to directly influence site conditions or the execution of the works, these are general guidelines which do not in any way bind our Company. We therefore recommend carrying out a preliminary test to verify the product's suitability for the intended use; in any case, anyone intending to use it is required to determine whether or not it is suitable for the intended use and, in any event, assumes all liability that may arise from its use. Always refer to the latest updated version of the Technical Data Sheet, available on the website www.litokol.com

Specification item

Anti-fracture decoupling where subsequent tiling is planned must be carried out using an anti-fracture decoupling membrane in rolls for the installation of floor and wall coverings in ceramic tiles, porcelain stoneware and natural stone, including removable types such as Litotex by Litokol Lab SpA.

Product details **No. 618**

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