SafetyGel®
Technical Specifications

Continuous, watertight, crack-resistant elastic gel membrane for the waterproofing of swimming pools, terraces, balconies and showers, and for the prevention of cracks when laying tiles of all types and sizes, as well as natural stone. Formula based on 6-Dimensional Elasticity technology, for which an international patent application has been filed. Waiting time between the 1st and 2nd coats: 2 hours. Waiting time before fitting the cladding: 2 hours.

Product description

Continuous, watertight, crack-resistant elastic gel membrane for the waterproofing of swimming pools, terraces, balconies and showers, and for the prevention of cracks when laying tiles of all types and sizes, as well as natural stone.
Formula based on 6-Dimensional Elasticity technology, for which an international patent application has been filed.
Ready to use, quick-drying (rainproof in 2 hours), requires no reinforcement mesh, tapes or strips for waterproofing corners and edges. It is easily applied with a roller, brush, smooth steel trowel or airless sprayer, creating a continuous, joint-free barrier for waterproofing swimming pools, outdoor areas and damp environments; it also acts as an elastic, crack-bridging membrane for sealing cracks, offering exceptional tensile adhesion thanks to its latest-generation gel properties enhanced with polymerised quartz microspheres. It guarantees structural adhesion even on non-absorbent substrates such as old tiles, fibreglass, PVC, metal and wood.

Classified as DM 02 P – EN 14891

SafetyGel® combined with PowerGel® S1+ forms the High-Adhesion Anti-Fracture System – TileSafe® System, engineered for the installation of large-format tiles and slabs of any type and size in high-traffic areas, even on cracked substrates (up to 3 mm).
The elastic system helps to dissipate and neutralise movements in the substrate and expansion of the cladding, whilst distributing heavy loads

evenly without causing stress.
TileSafe® System is a highly innovative Litokol invention protected by patent application no. 102025000025363

Gel formula with an international patent application filed

SafetyGel® is a highly innovative Litokol invention with an international patent application filed under No. 102025000025348.
Elastomeric gel with a proprietary blend of polymer resins
3D structure with polymerised quartz microspheres and inorganic microfillers
Reinforced with natural lamellar magnesium silicates
Hydrophobic protective booster based on reactive groups with a weatherproofing action
Enhanced cross-linking action

SafetyGel® embodies Litokol's ongoing scientific progress
It is designed using innovative raw materials to improve the installation experience, enhance safety and reduce environmental impact

Awards

ADI InOut Hospitality Design Award 2025
Litokol SafetyGel® has been awarded a prize by ADI – the Association for Industrial Design – for its "commitment to innovation, which, through the development of innovative, patented materials, simplifies and speeds up the installation of ceramic flooring, reducing the challenges associated with waterproofing and the number of components used".

Powered by

6-Dimensional Elasticity® technology

6-way multidimensional elasticity

The unique feature of 6-Dimensional Elasticity® technology is its ability to deform in six different directions: horizontal, vertical, diagonal and in two torsional directions, with the added ability to deform in a complex manner under varying stresses.

This advanced elasticity allows the SafetyGel® membrane to adapt to complex structural movements, such as thermal expansion, vibrations, micro-settlement and mechanical stresses, without compromising its integrity and functionality.

Gel Performance Continuous Membrane

Seamless gel safety membrane

Intuitive application. SafetyGel® can be applied quickly and easily, in an even layer, using a roller, trowel, brush or spray gun across the entire surface – both horizontal and vertical – including difficult areas such as corners, edges, micro-cracks and floor-to-wall junctions, eliminating the need for additional reinforcements such as mesh, tape or strips.
It adapts easily to uneven surfaces with complex geometries or those that are difficult to treat with traditional roll-applied or cement-based membranes.

Continuity. SafetyGel® is engineered using 6-dimensional elasticity technology, which ensures perfect adhesion even on uneven or difficult surfaces, such as cracked flooring or complex structures, guaranteeing long-lasting elasticity and flexibility, even at joints and 90° angles.
It has no joints because the gel self-cures at joints or connections through a chemical process in which the material's molecules bond together to form a three-dimensional covalent network.
The continuous gel membrane thus provides uninterrupted protection, eliminating any vulnerable points that might develop around tape or flanges.
- Creates a single, seamless 'glass-like' surface with no weak points.

Gel Performance Watertight Membrane

Watertight safety gel membrane

Total waterproofing. SafetyGel® is an advanced waterproofing solution, designed to provide a continuous, completely watertight barrier against water, preventing infiltration even under high water pressure.
- Watertight seal - Water resistance under positive pressure > 3.0 bar
- Suitable for extra-severe service conditions – chlorinated water (P)

Flexibility. The gel is elastic in all six dimensions, allowing the membrane to adapt to structural movements without compromising the effectiveness of the protection. It is ideal for use in dynamic environments where there are temperature changes, potential vibrations and thermal expansion.
- Permanent elasticity in all 6 dimensions down to -20°C (02)
- Double crack-bridging capacity (23°C) > 1.66 mm
- Elasticity – elongation at break > 500%

Gel Performance Anti-fracture Membrane

High-adhesion, ultra-thin anti-fracture gel safety membrane

Movement absorption. SafetyGel® acts as a continuous, thin, highly adhesive and ultra-resistant elastic layer that absorbs minor movements in the substrate, preventing the formation of cracks and fractures in the tiles.
This is particularly useful in environments where the substrate may be subject to movement or expansion, such as in the case of ceramic, concrete or other flooring materials that are susceptible to deformation over time.

Extremely thin with no air pockets. SafetyGel® provides crack-resistant waterproofing that does not require a 3D structure with cavities to allow for deformation: its extremely thin, continuous profile prevents the formation of air pockets, which are detrimental to the flexural and impact resistance of ceramic tiles.
With a continuous elastic layer of just 1.5 mm, compared to the 4–6 mm of HDPE-LPDE roll-based systems, SafetyGel® is ideal for refurbishment projects where it is necessary to maintain the levels and heights of thresholds, window frames and stairs without restricting the usable internal height of the rooms, whilst also avoiding the typical sensation of poor adhesion and instability underfoot on semi-adhered floors ('hollow sound').

Resistance to cracking and fissuring. SafetyGel® combined with PowerGel® S1+ forms the High-Adhesion Anti-Crack System – TileSafe® System, which prevents compressive or tensile forces from damaging the tiles.
The system comprises two different technologies:
1. SafetyGel® – a 6-Dimensional anti-fracture elastic membrane, capable of absorbing and compensating for movements in all six spatial directions before they are transmitted to the covering.

2. PowerGel® S1+ – a smart, elastic, crack-resistant tri-polymer gel, enhanced with Crack Prevention® technology, capable of protecting the internal bond area from micro-cracks and mechanical stress.
Acts as a smart structural interface, protecting the adhesive transition zone (ITZ) and promoting a flexible, long-lasting bond.
Together, these two elements form an active integrated system that works by adhesion: the interaction between the two technologies drastically reduces stress concentration, prevents the vertical and lateral propagation of micro-cracks and increases the mechanical durability of the tiling system.
SafetyGel® and PowerGel® S1+ are not two separate products, but a co-engineered system that takes installation to a new level of reliability. A single resilient, adaptive and monolithic surface, capable of preventing cracks, managing stress and lasting over time.
The system operates as a bonded installation with exceptional tensile adhesion, ideal for large-format tiles and slabs of any type and size in high-traffic areas, even on cracked substrates (up to 3 mm), and guarantees structural adhesion even on non-absorbent substrates such as existing tiles, fibreglass, PVC and timber.
The gel membrane is designed to be durable, maintaining its elasticity over time without deteriorating, thereby significantly extending the service life of the bonded system.
- Crack bridging of the TileSafe® System > 1.6 mm in accordance with ANSI A 118.12
- Tensile adhesion of the TileSafe® System > 1.8 N/mm 2 < /sup > in accordance with EN 14891

Focus on the TileSafe® System for eliminating movement joints.
Crack-bridging capacity is measured in accordance with ANSI A 118.12 – 5.4: the integrated TileSafe® System guarantees high, elastic and long-lasting adhesion of the bonded system, capable of accommodating crack openings exceeding 1.6 mm.
The resilient, adaptive and monolithic system formed by combining PowerGel® S1+ with SafetyGel® is a continuous system that does not need to be interrupted at movement joints in the substrate and does not require these joints to be respected.
Compressive, tensile and shear forces are distributed and absorbed by the intelligent structural interface, which protects the adhesive transition zone (ITZ) and ensures a durable, elastic bond.
Outdoors, where conditions are the most critical and stressful for the bonded system, movements of the substrates and bonded membranes are absorbed by a network of elastic, deformable joints with a maximum mesh size of 3x3m (UNI 11493 – 7.9) and a minimum width of 5 mm, capable of accommodating transverse linear deformations of 1.3 mm (UNI 11493 7.9.2).
The TileSafe® System, characterised by its ability to bridge cracks > 1.6 mm, prevents movements and stresses in the substrate from damaging the new bonded covering, although expansion joints must still be provided across the full width of the tiles, corresponding solely to the thickness of the tiles.
In situations where more severe stresses are anticipated, the TileSafe® System can be installed by combining SafetyGel® with PowerGel® Pro Max: the dynamic crack-bridging capability ensures a monolithic structural bond capable of accommodating movements in cracks or joints > 3.2 mm.

Gel Performance Damping Membrane

Safety gel membrane with uniform load distribution

Uniform distribution of stresses. When SafetyGel® is applied to the floor and subsequently covered with tiles suitable for the intended use, it is able to distribute loads evenly. When the surface is subjected to stresses such as dynamic or static loads, the gel structure acts as a shock absorber, dispersing these forces across the entire surface and transferring them directly to the substrate, thereby reducing the risk of stress concentrations.
Resistance to deformation. SafetyGel® is designed to distribute loads; it is highly elastic and flexible and offers better resistance to localised deformation that may occur when a force is concentrated at a single point. This characteristic is important in contexts where there are cyclic or repeated movements, such as in flooring.
- Approved for extra-heavy-duty service.
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Chemistry + Smart

100% pure gel in H□O phase
Does not contain solvents or plasticisers
It does not contain cement or acetic polymers
Not hazardous to the applicator
Not hazardous to the environment
Not hazardous for transport – ADR-compliant
Non-corrosive and non-toxic
Continuous system free from rubber, plastic and PVC (rolls, membranes and tapes)
Ready to use, reusable, minimises waste and material wastage
Retains elasticity and all performance characteristics even after being reopened and reused
Improves resource efficiency and avoids the disposal of unused product
Very low emissions of volatile organic compounds (VOCs)

Certifications

DM 02P EN 14891
ANSI A 118.10
ANSI A 118.12
EC1 Plus Gev Emicode
A+ Indoor air emissions
EPD Environmental Product Declaration

SafetyGel® and the environment

LCA results for Global Warming Potential – Greenhouse Gases (GWP-GHG)

Impact category	Unit	A1–A3	C1	C2	C3	C4	D
Climate change GWP-GHG	kg CO□ eq	7.85 $10^{\square 1}$	4.38 10^{-3}	1.14 × $10^{\square 2}$	0	2.97 × $10^{\square 2}$	-2.00 10^{-2}

Substrates

Screeds
Self-levelling compounds
Levelling Compounds
Plaster and skim coats
Existing tiles
Radiant heating systems
Concrete and reinforced concrete
Plasterboard
Plaster and anhydrite
Fibre-cement sheets
Wood and engineered wood panels
Metals
Plastics and PVC
Fibreglass
Lightweight panels
Existing cement-polymer waterproofing products

Uses

Interior – exterior
Floors – walls
Overlay
Indoor wet areas, bathrooms and showers
Swimming pools and fountains
Terraces and balconies
SPA and Hammam
Facades
Industrial flooring
Residential, public, commercial and street furniture
Areas subject to heavy footfall and high stress

Interior – in combination with PowerGel® S1+
Cracked substrates
New, uncured substrates or substrates of a different nature
Change to a different laying pattern or tile size
Installation near thresholds
Installation over utility trenches
Installation near expansion and partition joints (in combination with SafetyTex Anti-Fracture)

Exteriors – used in conjunction with SafetyTex Anti-Fracture and in combination with PowerGel® S1+
Cracked substrates
New, uncured substrates or substrates of a different nature
Change to a different laying pattern or tile size
Installation near thresholds
Installation over utility trenches
Installation near expansion joints – partitioning

Limitations

Refer to national standards, such as UNI 11493
The ambient and surface temperatures must be above +5°C at the time of

installation and for 72 hours after application
Apply the finish to the membrane within 72 hours in external applications to avoid prolonged exposure to ultraviolet rays; alternatively, cover with sunshade sheets; in applications exposed to traffic and abrasion, cover with suitable protection systems against direct abrasion until the finish is applied
Do not apply to wet surfaces, damp substrates (> 3% relative humidity) or those subject to rising damp
Do not apply in thicknesses > 1 mm per coat
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 apply if rain is forecast or if weather conditions are likely to hinder drying
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
Protect the waterproofing from heavy rain for the first 2 hours after application under standard conditions
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

Product specifications

Composition	Single-component elastomeric gel
Appearance	Fluid thixotropic gel
Colour	Magenta violet
Responsible packaging	Second-life recycled plastic buckets, 5, 10 and 20 kg
Shelf life	24 months in original packaging in a dry place. Do not expose to frost
Customs heading	40021100

Technical Specifications

Compliance	DM 02 P	EN 14891
Initial adhesion	≥ 0.5 N/mm^2	A.6.2
Adhesion after immersion in water	≥ 0.5 N/mm^2	A.6.3
Adhesion after thermal ageing	≥ 0.5 N/mm^2	A.6.5
Adhesion after freeze-thaw cycles	≥ 0.5 N/mm^2	A.6.6
Adhesion after contact with lime water	≥ 0.5 N/mm^2	A.6.9
Adhesion after contact with chlorinated water	≥ 0.5 N/mm^2	A.6.7
Water tightness under positive pressure of 1.5 bar	No penetration; weight gain < 20 g	A7
Crack-bridging capacity under normal conditions	≥ 0.75 mm	A.8.2
Crack-bridging capability at very low temperatures (-20°C)	≥ 0.75 mm	A.8.3

Compliance		ANSI A118.10
Growth of mould, fungi and microorganisms	Growth not permitted	4.1
Overlap tear strength	16 lbf/2" width	4.2
	7.4 kg/5 cm	4.2
Tensile strength	≥ 170 psi	4.3
	≥ 1.2 N/mm^2	4.3

Dimensional stability	< 0.7%	4.4
Waterproof after 48 hours	No penetration	4.5
Cut resistance on concrete	≥ 50 psi	5.0
For porcelain stoneware	≥ 0.35 N/mm^2	5.0
Initial adhesion after 7 days	≥ 50 psi	5.3
	≥ 0.35 N/mm^2	5.3
Adhesion after immersion	≥ 50 psi	5.4
in water at 7 days	≥ 0.35 N/mm^2	5.4
Initial bond strength after 28 days	≥ 50 psi	5.5
	≥ 0.35 N/mm^2	5.5
Initial bond strength after 12 weeks	≥ 50 psi	5.6
	≥ 0.35 N/mm^2	5.6
Adhesion after immersion	≥ 50 psi	5.7
in water for 100 days	≥ 0.35 N/mm^2	5.7

Compliance		ANSI A118.12
Growth of mould, fungi and microorganisms	Growth not permitted	4.1
Shear strength on tiles	≥ 50 psi	5.1
ceramic	≥ 0.35 N/mm^2	5.1
Initial adhesion after 7 days	≥ 50 psi	5.1.3
	≥ 0.35 N/mm^2	5.1.3
Adhesion after immersion in water	≥ 50 psi	5.1.4
	≥ 0.35 N/mm^2	5.1.4
Initial bond strength after 28 days	≥ 50 psi	5.1.5
	≥ 0.35 N/mm^2	5.1.5
Adhesion after ageing	≥ 50 psi	5.1.6
thermal	≥ 0.35 N/mm^2	5.1.6
Point load test	≥ 1000 lbf	5.2
	≥ 454 kg	5.2
Insulation against cracks (openings)		5.4
- SafetyGel® + PowerGel® S1+	≥ 1/16"	Standard
	≥ 1.6 mm	Performance
- SafetyGel® + PowerGel® Pro Max	≥ 1/8"	High
	≥ 3.2 mm	Performance

Application Specifications

Preparation of the gel mixture	Ready-to-use gel
pH of the mixture	8 - 9
Specific gravity of the mixture	1.48 kg/dm^3
Total thickness (dry)	0.8–1 mm
Application	Roller, brush, smooth steel trowel or airless sprayer
Permissible application temperatures	From +5°C to +40°C
Waiting time after applying a coat diluted by 10–20% with water	30 min
Drying time between consecutive coats	2 h
Waiting time before laying the covering	2 h
Drying time between subsequent coats and before applying the finish at 10°C	6 h
Operating temperature	From -20°C to +90°C
Cleaning of equipment	With water when the product is fresh. Mechanically once the product has hardened.
Notes	Data recorded at a temperature of +23 °C, 50% RH and in the absence of ventilation. These may vary depending on specific site conditions

Coverage on concrete, plasterboard, ceramic tiles, natural stone, mosaics, fibre-cement panels and timber panels	1.0 kg/m^2 in two coats
Coverage on HydroLevel / X-Level skim coats, cementitious skim coats and lightweight panels with cementitious skim coat	1.2 kg/m^2 in three coats
Coverage on X-Floor / X-Floor Pro screeds and cementitious screeds	1.4 kg/m^2 in three coats
Coverage for crack sealing to ANSI A 118.12 on concrete, plasterboard, ceramic tiles, natural stone, mosaics, fibre-cement panels and timber panels	1.5 kg/m^2 in two or more coats
Coverage for crack bridging (ANSI A 118.12) on HydroLevel / X-Level skim coats, cementitious skim coats and lightweight panels with cementitious skim coats	1.7 kg/m^2 in three or more coats
Coverage for crack sealing to ANSI A 118.12 on X-Floor / X-Floor Pro screeds and cementitious screeds	1.9 kg/m^2 in three or more coats

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.
For surfaces frequently exposed to contact with water, such as balconies, terraces and shower floors, check that the gradients and the size of the drainage systems are adequate to allow proper water runoff, taking into account the size of the exposed surface and the maximum expected wetting conditions.
Generally, a gradient of 1–1.5% is sufficient to ensure proper water drainage.
Any levelling of cementitious substrates or the creation of gradients can be carried out using the fast-setting, non-shrink structural levelling compound HydroLevel®.

On porous substrates such as screeds and cementitious skim coats, or those made with HydroLevel®, and lightweight panels with a surface finish of reinforced cementitious skim coats, apply one coat of SafetyGel® primer, diluted with water by 10–20 per cent, using a roller or brush. This application seals any surface porosity in the substrate, preventing the formation of any micro-bubbles when the subsequent first coat of SafetyGel® is applied after approximately 30 minutes.
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.
Create slopes on balconies or pavements using the HydroLevel® levelling compound.
Dusty, porous and absorbent substrates 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.
Any cracks or fissures must be sealed with CrackRepair.
In any case, it is essential to consult the relevant technical data sheets to ensure the correct use of the products indicated.

Application

Watertight safety gel membrane

On porous substrates, apply a primer coat of SafetyGel® diluted with water at 10–20%.
To ensure complete waterproofing, begin the waterproofing process by applying SafetyGel® evenly with a suitable brush to the most critical perimeter areas, such as corners, edges, wall-to-floor and wall-to-wall junctions, and any micro-cracks present in the substrate.
This operation requires the utmost care and attention from the professional applicator, who can thus avoid the risks associated with the use of tapes, strips and special fittings – typical weak points in waterproofing systems.
Next, apply the first coat of SafetyGel® evenly directly onto the substrate using a long-pile acrylic roller, brush, smooth steel trowel or airless sprayer to a consistent thickness of approximately 0.5 mm, taking care to cover the entire surface to be waterproofed, overlapping the previously applied product in the corners and edges to ensure perfect continuity and sealing of the membrane.
SafetyGel® is dry when it turns dark purple: typically, the drying time is around 2 hours, although this may vary depending on site conditions such as temperature, ambient humidity and ventilation.
Once the first coat (dark purple in colour) is completely dry, apply a second coat of SafetyGel® evenly to a consistent thickness of approximately 0.5 mm, ensuring that the entire waterproofed surface is covered.
The distinct light purple colour of the fresh product makes it easier for the professional applicator to check that the first coat has been applied completely, achieving a uniform total thickness of approximately 0.8–1 mm.

To ensure a perfect seal with the waterproofing membrane where services such as pipes, drains and light fittings pass through, use the special HydroCollar or HydroDrain sealing fittings, which should be positioned and embedded in the first coat of SafetyGel® and subsequently covered with the second coat.
As an alternative to using the special HydroCollar or HydroDrain sealing fittings, the system's penetration can be sealed to SafetyGel® using HydroPixel®, the sealant specifically designed for underwater applications.
The professional applicator will create a groove approximately 3–4 mm wide around the through-wall fitting and, after cleaning the surfaces, will apply HydroPixel® to form a continuous bead between the through-wall fitting and the surface of SafetyGel®, taking care to press firmly and finish by smoothing the surface to ensure complete filling and perfect adhesion.
When applying SafetyGel® to joints or open edges, use SafetyTex Anti-Fracture 20 as a backing.
Please consult the technical data sheets for the products listed before use.

High-adhesion, shatter-resistant gel safety membrane

On porous substrates, apply a primer coat of SafetyGel® diluted with water at 10–20%.
To ensure isolation, prevent the formation of cracks in the tiles and dissipate stresses to the substrate, apply the first coat of undiluted SafetyGel® evenly – over any dry, diluted coat, if present – directly onto the substrate using a long-pile acrylic roller, brush or smooth steel trowel to a consistent thickness of approximately 0.5 mm.
SafetyGel® is dry when it turns dark purple: typically, the drying time is around 2 hours, although this may vary depending on site conditions such as temperature, ambient humidity and ventilation.
Apply a second coat of SafetyGel® evenly to a consistent thickness of approximately 0.5 mm, ensuring the entire surface is covered, then repeat

the process for the third coat.
The distinct light purple colour of the fresh product makes it easier for the professional applicator to check that the first coat has been fully applied, creating a continuous, high-strength, elastic layer with a uniform total thickness of approximately 1.2–1.5 mm.
To ensure protection against cracks in outdoor tiles and against stresses transmitted by movement joints in substrates both indoors and outdoors, reinforce the first coat of undiluted SafetyGel® with SafetyTex Anti-Fracture: apply the fabric to the fresh gel membrane and smooth it out using a pressure-free roller to avoid creases and bulges.

SafetyGel® bonds firmly and develops high tensile adhesion, ensuring high performance in the Interface Transition Zone (ITZ) and making a decisive contribution to the mechanical efficiency of the composite system.

Flooring installation

Tiles may be laid at least 2 hours after the final coat under standard conditions.
The installation of ceramic tiles, natural stone or mosaics will be carried out using the ultra-high-performance PowerGel® S1+, PowerGel® S2+, PowerGel® Pro Max, FastGel® S1+ or FastGel® Pro gels, based on Litokol science, which guarantee complete force transfer, the consistent performance of the TileSafe® system and total safety.
To ensure perfect adhesion of the Adhesive Gel to the SafetyGel® elastic anti-fracture waterproofing 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, in damp areas and as part of the High-Adhesion Anti-Crack System – TileSafe® System, 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

Due to the high content of adhesive polymers, it is recommended to wash tools and remove any product residue from surfaces with water before the gel hardens. Once the reaction is complete and the gel has hardened, it can only be removed mechanically.

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

Continuous, watertight gel safety membrane
The waterproofing of swimming pools, basins, fountains, terraces, balconies, showers, spas, hammams and damp areas where ceramic tiles, natural stone and mosaics are to be laid subsequently must be carried out using a continuous, watertight and crack-resistant elastic gel membrane, featuring 6-Dimensional Elasticity technology (for which an international patent application has been filed), ready-to-use, quick-drying, with a 2-hour waiting time between the first and second coats, a 2-hour waiting time before laying the finish, rain-safe after 2 hours, requiring no reinforcement mesh, tapes or perimeter strips, classified as DM 02 P in accordance with standard EN 14891, SafetyGel® type by Litokol Lab SpA.

Continuous anti-fracture gel safety membrane and high-adhesion anti-fracture system – TileSafe® System
Insulation, crack prevention and the uniform distribution of loads in floors covered with ceramic tiles and natural stone must be achieved using a continuous elastic anti-fracture gel membrane, featuring 6-Dimensional Elasticity technology, for which an international patent application has been filed. It is ready-to-use, quick-drying, with a waiting time of 2 hours between the first and second coats, a waiting time of 2 hours before laying the covering, and rain-safe after 2 hours; it does not require a reinforcement mesh, perimeter tapes or strips, classified as DM 02 P in accordance with standard EN 14891, type SafetyGel® by Litokol Lab SpA.
Combined with an elastic, crack-resistant tripolymer gel, reinforced with quartz microspheres, Fluidotixo® Antifatica, a low-cement-content product that prevents the formation of cracks when laying tiles, porcelain stoneware of all types and sizes, and natural stone, classified as C2 TE S1 in accordance with standard EN 12004, such as PowerGel® S1+ by Litokol Lab SpA, forms the High-Adhesion Anti-Fracture System - TileSafe® System.

Product details **No. 630**
Revision **No. 2**
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Litokol

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