

starlastik

02/17 239



STARLASTIK

Highly deformable, quick-setting, fiber-reinforced, cement-based monocomponent waterproofing and adhesive mortar for tiles.

waterproofing products

TECHNOKOLLA





≥20±1%
≤24±1%



50 min



5-30°C



Smooth/
Roller/
Brush/
Spray gun



4 mm

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MAIN FEATURES

- Waterproofing and adhesive in a single product
- Monocomponent product
- Reinforcing net not required
- High bonding capacity
- Good crack bridging ability

APPEARANCE

Grey powder

STORAGE

9 months in dry place

FIELDS OF USE

- Waterproofing of: bathrooms, showers, terraces, swimming pools and successive laying of ceramic tiles.
- Waterproofing terraces and balconies and all kinds of surfaces directly exposed to the weather.
- Waterproofing under tiles on terraces and balconies. Conforms to the class CMO2P performance requirements of standard EN 14891:2012.
- Laying outdoor and indoor, on the wall and floor, of tiles of any kind. Particularly appropriate for large-format tiles.
- Laying of tiles on heating water or electric screeds.

SUBSTRATES

Concrete, cement-based plaster and screeds, cement-lime mortar, old ceramic and wood.

NATURE OF THE PRODUCT

STARLASTIK consists of high-strength binders, selected quartz mineral charges of fine particle size, synthetic fibers and specific additives. For further details, ask the technical office for the safety brief or download it from the web site www.technokolla.com.

CONSUMPTION

approx. 1.2 kg/m² per mm of thickness

OPERATIONS PRIOR TO APPLICATION

The substrate must be properly weathered, structurally sound, free from dust, dirt, grease, oil and efflorescence. Prepare surfaces using a high-pressure water jet cleaner or sand-blaster to remove all traces of previous cladding or crumbling parts that could prevent the product from bonding. Cracked concrete or gaps around pipes, light fittings and systems must be sealed with REPAIR.

waterproofing products



RECOMMENDED ACCESSORIES



437337

Strip RL 120

HOW TO PREPARE THE SUBSTRATE

It may be advisable to create jointing coves between floor and walls using GAP pre-mixed mortar to achieve an optimum waterproofing result in swimming pools, tanks, reservoirs and underground rooms. It is important to wait until the new substrates have become properly weathered.

The more frequent cases with their recommended weathering periods are listed in the table below. When the number of days and the humidity rate are both indicated, remember that both conditions must be complied with. If substrate has been weathered but subjected to heavy rainfall, wait until its humidity rate has returned to within the value given in the table.

SUBSTRATE	MINIMUM TIME INTERVAL BEFORE LAYING	MAX RESIDUAL HUMIDITY
KRONOS screeds	5 days	6%
TIMER-2 screeds	24 h	6%
Cement-based screeds	28 days	6%
Cement-based plaster	3 weeks	5%
Concrete	3 months	5%

HOW TO PREPARE THE MIXTURE

Blend powder (20 kg bag) with water until mixture is homogeneous, lump-free and of a suitable consistency. It is advisable to use a blender at low speed (approx. 500 rpm). Allow mixture to rest for 5 minutes then stir again briefly, after which it is ready for use.

Do not add anything to the mixture. Prepare all the product in the package to prevent the particles of aggregate in the powder component from being distributed unevenly through the mixture.

APPLICATION

Wet the substrate. Avoid condensation and do not allow water to stagnate.

It is absolutely essential to reinforce the waterproofing layer with STRIP RL 120 on a level with joints, corners, contact points between different types of materials. Strip RL 120 must be applied to the first layer of fresh mortar and then covered by the second layer.

Waterproofing and fixing tiles in a single coat.

Apply STARLASTIK with the special applicator, which allows it to be evenly spread and also leaves a 2 mm homogeneous, continuous film of product (see Fig.1 and 2).

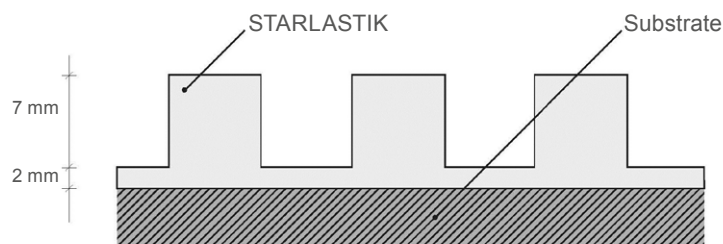


Fig. 1

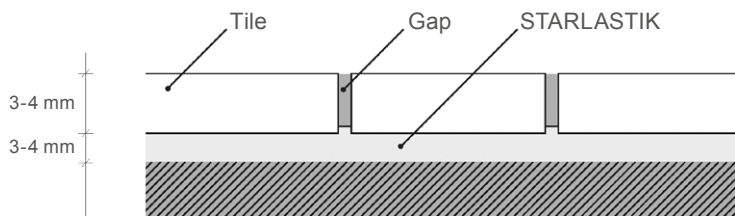


Fig. 2

The tile must be applied as soon as the layer has been spread by massaging the tile into its definitive position. The total layer of homogeneous and continuous STARLASTIK that remains under laid tiles must be between 3 and 4 mm thick. Remove any excess product from the gaps. When the temperature is around 20°C, the floor can be grouted after about 24 hours.

Waterproofing and fixing tiles in two phases.

After STRIP RL 120 has been positioned as described above, spread the product with a smooth steel trowel. Make sure it is pressed into the substrate so as to ensure perfect contact. The layer must be about 2 mm thick.

At a temperature of 20°C, the applied coat is treadable after about 3 hours and the tiles can then be laid.

Use a normal trowel for applying adhesive. The size of its serrations should be chosen to suit the tile size. The layer of product under the tile must be 3 mm thick at most (not counting the first coat). STARLASTIK does not need to be applied in two coats even when the tiles are large, since its consistency is that of a full-bed adhesive.

Remove any excess product from between the gaps. If this occurs frequently, use a trowel with smaller serrations.

The floor can be grouted after 24 hours.

Use as a quick waterproofing product only.

Apply STARLASTIK by:

- trowel; exercise a fair amount of pressure to press it into the substrate;
- brush, flat brush or medium-short fleece roller to evenly spread the product over the substrate. Contact the Sika Italia Technical Service for more details if the product must be applied by spraying.

The total thickness of the product must be at least 3 mm, applied in at least two coats. 2 mm is the maximum thickness recommended for each layer.

The product must be applied in continuous layers of even thickness.

Always wait until the previous layer has set (approx. 3 hours in a temperature of approx. 20°C) before applying the next layer.

Ceramic tiles and glass mosaic can be applied to STARLASTIK after 3-24 hours, depending on the temperature, using the same STARLASTIK or a suitable cement-based adhesive from the Technokolla range (so long as it conforms to class C2 of standard EN 12004 at least).

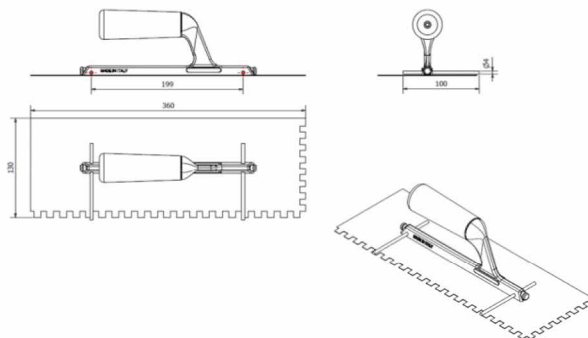
Gaps between tiles can be grouted with suitable cement-based or epoxy grouting.

Comply with the following time intervals:

	20°C	10°C
Horizontal tiling	~ 3 h	~ 24 h
Vertical tiling	~ 3 h	~ 6 h
Immersion in water	~ 24 h	~ 72 h

The time intervals may differ, depending on the degree of humidity and the substrate.

Special STARLASTIK Trowel



STARLASTIK special spatulas are available in two different teeth sizes: Ø 9 mm round teeth and 10x10 mm square teeth. Since STARLASTIK shows an almost pourable fresh consistency, is not necessary to apply the product also on the tile back surface. So the choice of STARLASTIK spatula must be done in dependence of the tile size, in order to assure a complete covering and homogeneous distribution of the product below the tile surface. We suggest to use 10x10 mm spatula up to a maximum 25x25 tile size; for higher tile dimensions is recommended the Ø 9 mm spatula.

The exceeding length of the adjustable steel pins must be 3 mm over the tooth length. This will allow to apply always a continuous layer of 2 mm of product.

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TECHNICAL SPECIFICATIONS	VALUE	REQUIREMENT	STANDARD
Weight density	1.6 kg/liter		
Particle size	Dmax: 0.315 mm		
Mixing ratio - floor application	approx. 4.8 liters of water per 20 kg bag		
Mixing ratio - wall application	approx. 4 liters of water per 20 kg bag		
Open time	30 minutes (in accordance with EN 12004:2012)		EN 1346
Pot-Life at 20°C	approx. 40 min		
Initial tensile strength	~ 2.1 N/mm ²	≥ 1.0 N/mm ²	EN 1348
Tensile strength after the action of heat	~ 3.1 N/mm ²	≥ 1.0 N/mm ²	EN 1348
Tensile strength after immersion in water	~ 1.1 N/mm ²	≥ 1.0 N/mm ²	EN 1348
Tensile strength after freezing-thawing cycles	~ 3.1 N/mm ²	≥ 1.0 N/mm ²	EN 1348
Transverse deformation	~ 17.3 mm	≥ 0.5 mm	EN 12002

TECHNICAL SPECIFICATIONS	TEST METHOD	RESULTS	REQUIREMENT	STANDARD
Waterproof (1.5 bar for 7 days)	A.7	No passage of water	No passage of water	EN 14891:2012
Initial tensile strength	A.6.2	~ 1.9 MPa	≥ 0.5 MPa	EN 14891:2012
Tensile strength after immersion in water	A.6.3	~ 1.1 MPa	≥ 0.5 MPa	EN 14891:2012
Tensile strength after thermal ageing	A.6.5	~ 2.8 MPa	≥ 0.5 MPa	EN 14891:2012
Tensile strength after freezing-thawing cycles	A.6.6	~ 1.1 MPa	> 0.5 MPa	EN 14891:2012
Tensile strength after immersion in limewater	A.6.9	~ 1.4 MPa	≥ 0.5 MPa	EN 14891:2012
Tensile strength after immersion in chlorinated water	A.6.7	~ 1.2 MPa	≥ 0.5 MPa	EN 14891:2012
Crack resistance in standard conditions (+23°C)	A.8.2	~ 1.34 mm (without net)	≥ 0.75 mm	EN 14891:2012
Crack resistance at low temperatures (-5°C)	A.8.3	~ 1.1 mm (without net)	≥ 0.75 mm	EN 14891:2012
Crack resistance at low temperatures (-20°C)	A.8.3	~ 0.8 mm (with net)	≥ 0.75 mm	EN 14891:2012

Values obtained after 3.6 kg/m² total consumption in two coats.

APPROVALS / CERTIFICATIONS

Cement-based liquid product (CM) for waterproofing treatments under tiles (glued with class C2 adhesive, according to EN 12004) with crack bridging ability at low temperatures (-20°C) and suitable for contact with chlorinated water, in compliance with the requirements established by EN 14891:2012 in class CMO2P. Conforms to annex ZA Table ZA.1 DoP n° 02 07 01 01 001 0 000231 1026. 14891: the notified test laboratory Modena Centro Prove S.r.l., Lab. No. 1599 performed the initial type tests on samples taken from the manufacturer, in accordance with AVCP System Type 3 testing and issued test reports Nos. 20153015 and 20153012.

WARNINGS AND RECOMMENDATIONS

- When laying tiles, there are no limitations as to tile size but outdoors, careful use of expansion joints is required when tile size exceeds 60 cm per side. If in doubt, contact the Sika Italia Technical Service.
- Use 3-4% less water in mixture when laying tiles on vertical substrates.
- In swimming pools, STARLASTIK must always be covered by tiles. It must never be left bare.
- Once it has set, the product can be left visible and subjected to moderate pedestrian traffic.
- Protect from rain for at least 12-24 hours after application. Do not apply product under direct sunlight and/or in strong wind.
- The product may take longer to harden if the site is damp, e.g. in closed rooms or poorly ventilated basements.
- Use Strip RL 120 for applications in swimming pools.

SPECIFICATION

The ceramic tiles on outdoor floors must be glued with monocomponent waterproofing cement-based mortar such as Technokolla's STARLASTIK, which allows the tiles to be laid and the floor to be waterproofed at the same time.

Technokolla reminds you to examine the "notes" document that completes the information in this data sheet. The document can be downloaded in the pdf format from the website www.technokolla.com.

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Sika Italia S.p.A.

Registered Office and Administrative Headquarters: Via L. Einaudi 6,
20068 Peschiera Borromeo (MI)

Sassuolo Plant (MO): Via Radici in Piano 558, Postal Code 41049

Tel: +39 0536 809711 Fax: +39 0536 809729 www.technokolla.com