rasolastik-plus

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RASOLASTIK-PLUS

Cement-based flexible two-component waterproofing mortar for swimming pools, terraces and balconies prior to fixing ceramic tiles.

waterproofing products

TECHNOKOLLA®

A SIKA BRAND

5-35°C Smooth 4 mm

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EN 14891 EN 14891 EN 1504-2 EN 1504-2

APPEARANCE

Comp. A: grey powder
Comp. B: white liquid

STORAGE

12 months in dry place, protected from frost

FIELDS OF USE

- Waterproofing walls and floors in: swimming pools, bathrooms, showers or very damp places prior to laying ceramic tiles.
- Waterproofing terraces, balconies, prior to laying ceramic tiles conforming to the performance requirements of class CMO2P of standard EN 14891:2012. Especially suitable for raised floors.
- Restoring the waterproofing properties of old terraces without demolishing the existing floor surface.
- Protective, flexible, carbonatation-inhibiting coating for concrete surfaces. Protects against the effects of de-icing salts, freezing-thawing cycles and carbon dioxide; improves durability.
- Waterproofing and protection of waterworks such as basins, tanks, swimming pools, concrete pipes, reservoirs and canals.

SUBSTRATES

Cement-based plaster, cement-lime mortar, cement, concrete, ceramic, plasterboard, and marine wood can be treated with RASOLASTIK-PLUS.

NATURE OF THE PRODUCT

Comp. A consists of high-strength cements, selected mineral charges, synthetic fibers and specific additives.
Comp. B contains organic copolymers in watery dispersion and specific additives. Ask the technical office for the safety brief containing further details.

CONSUMPTION

~ 1.8 kg/m² per mm of thickness

OPERATIONS PRIOR TO APPLICATION

It is very important to make sure that there is no rising damp in the walls or screeds. In this case, RASOLASTIK-PLUS can only be applied after the cause has been eliminated and when the saline bloom has been removed. Substrates must be structurally sound, clean, dry and free of all contaminants such as dirt, oil,grease, coatings and surface treatments, etc.
Clean surfaces by sandblasting, high-pressure water-jetting (400 bar), wire-brushing, sanding on ceramic tiles, etc. in order to eliminate dust deposits, previous coatings, traces of grease, rust, form-removal agents, paintings, cement laitance and other substances which may harm RASOLASTIK-PLUS

437299
Strip RL 80 S

437337
Strip RL 120

adhesion onto the subgrade. Repair concrete substrate, if necessary, with cementitious mortar. Cracked concrete or gaps around pipes, light fittings and systems must be sealed.

SUBSTRATE	MINIMUM TIME INTERVAL PRIOR TO APPLICATION	MAX RESIDUE HUMIDITY %
KRONOS screeds	5 days	6
Cement-based screeds	28 days	6
Cement-based plaster	3 weeks	5

If substrate is new, it is very important to know exactly how it has been weathered and the degree of humidity. The more frequent cases with their relative ageing 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 within the value given in the table.

HOW TO PREPARE THE SUBSTRATES

Subgrade must be left naturally dry or humid, as it is. Don't dampen before application. Avoid standing water or condensation during application.
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. The STRIP must be applied according to the related technical data sheet.

HOW TO PREPARE THE MIXTURE

Blend powder (25 kg bag) with latex (8l can) until mixture is homogeneous and lump-free. Use blender at low speed (approx. 500 rpm). The mixture obtained can be used immediately. It is inadvisable to prepare the product by hand unless in small quantities at a time (4-5 kg).

APPLICATION

Apply the product with a smooth steel trowel. Press mortar well down onto substrate to ensure a perfect bond. If the temperature is higher than 15°C or the substrate is very absorbent, wet this latter with water to prevent the mortar from drying out and failing to adhere perfectly. Apply two coats of the product, each 1.5-2 mm thick, the second coat about 3-5 h after the first and never before the first coat has set. RASOLASTIK-PLUS must have completely hardened before being covered or allowed to come into contact with water.
Ceramic tiles and vitrified mosaic can be applied to RASOLASTIK-PLUS using class C2 adhesives such as TECHNIKO or higher.
Clean all tools and utensils with clean water immediately after use. Once hardened, the product can only be scraped off. Comply with the following time intervals:

	20°C	10°C
Horizontal tiling	~ 2 days	~ 7 days
Vertical tiling	~ 2 days	~ 3 days
Water-based emulsion paint	~ 2 days	~ 3 days
Immersion in water	~ 2 days	~ 7 days

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

WARNINGS AND RECOMMENDATIONS

- cracked or split cement-based screeds must be pretreated
- protect the leveled surface from the rain for at least 24/48 hours
- when ceramic tiles must be laid on RASOLASTIK-PLUS in swimming pools, we recommend use of the following adhesives to obtain optimum performance: TECHNORAP-2 or use TECHNOFLEX-2 for glass mosaic
- STRIP RL 80 S is not recommended for use in the pool
- avoid direct contact with chlorinated water in swimming pools by covering with tiles
- do not apply, and protect freshly applied product in case of direct sunlight, strong wind or if rain is imminent
- the product may take longer to harden if the site is damp, e.g. in closed rooms or poorly ventilated basements. Ventilation systems must be used
- prior to contact with drinking water, make sure that the product has completely hardened. Comply with the recommended time intervals. After this, thoroughly wash the surfaces and eliminate stagnating water before filling
- if the surface must be coated with solvent-based paint, conduct preliminary tests to make sure that the solvent does not damage the waterproofing layer
- the product can not be smoothened using float or sponge trowel
- RASOLASTIK-PLUS is permeable to water wapour and does not form a vapour barrier for resin based systems not permeable to gas
- for applications in high temperature environment, a light substrare prewetting could be necessary
- RASOLASTIK-PLUS is not suitable for car traffic. Pedestrian walk is allowed, only if protected by tiles

Do not apply straight onto:

- bitumen or bituminous sheathing

Do not use:

- on substrates subject to rising damp
- in layers more than 4 mm thick
- do not add anything to the product that is not specified in this data sheet

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TECHNICAL DATA	VALUE	REQUIREMENT	STANDARD
Weight density	~ 1.8 kg/liter		
Particle size	Dmax: 0.5 mm		
Mixing ratio	25 kg powder with 8 l. of latex		
Pot-Life at 20°C	~ 60 min		
Water pressure resistance - Negative	2.5 bar		UNI 8298/8
Permeability to CO_2	Sd: > 50 m	Sd ≥ 50 m	EN 1062-6
Water vapour permeability	Sd: ~1.00 m (Classe I)	Class I – SD < 5 m (permeable) Class II – 5m ≥ SD ≥ 50 m Class III – SD < 5 m (not perm.)	EN ISO 7783
Liquid water permeability and capillary absorption	~0.005 $Kg•m^{-2}•h^{-0,5}$	w < 0,1 $Kg•m^{-2}•h^{-0,5}$	EN 1062-3
Thermal compatibility (immersion in deicing salts)	~1.30 N/mm^2	≥ 0.8 N/mm^2	EN13687-1
Bond strength	~1.5 N/mm^2	≥ 0.8 N/mm^2	EN 1542
Crack bridging ability	~1.25 mm (without net)	Class A3 (+23°C)	EN 1062-7
Crack bridging ability	~0.90 mm (without net)	Class A3 (-10°C)	EN 1062-7
Dangerous substances (Hexavalent chromium)	< 0,0002%	< 0,0002%	EN 196-10
Reaction to fire	A2	Euroclass	EN 13501-1

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	~1.0 MPa	≥ 0.5 MPa	EN 14891:2012
Tensile strength after immersion in water	A.6.3	~0.7 MPa	≥ 0.5 MPa	EN 14891:2012
Tensile strength after thermal ageing	A.6.5	~1.8 MPa	≥ 0.5 MPa	EN 14891:2012
Tensile strength after freezing-thawing cycles	A.6.6	~0.6 MPa	> 0.5 MPa	EN 14891:2012
Tensile strength after immersion in limewater	A.6.9	~0.7 MPa	≥ 0.5 MPa	EN 14891:2012
Tensile strength after immersion in chlorinated water	A.6.7	~0.9 MPa	≥ 0.5 MPa	EN 14891:2012
Crack resistance in standard conditions (+23°C)	A.8.2	≥ 0.75 mm	≥ 0.75 mm	EN 14891:2012
Crack resistance at low temperatures (-20°C)	A.8.3	≥ 0.75 mm	≥ 0.75 mm	EN 14891:2012

Values obtained after 5.4 kg/m^2 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 No. 02 07 01 01 002 0 000106 1026. 14891: the notified test laboratory Modena Centro Prove S.r.l., Lab. No. 01599 performed the initial type tests on samples taken by the manufacturer, in accordance with AVCP System Type 3 testing and issued test report No. 20153633 .

SPECIFICATION

Substrates on which ceramic tiles must be laid must be waterproofed with cement-based mortar such as TECHNOKOLLA's RASOLASTIK-PLUS, to be blended with water alone.

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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