

Elastokol

POLYMERIC ELASTIC LATEX TO BE MIXED IN TOTAL OR PARTIAL REPLACEMENT OF THE MIXING WATER WITH MINERAL ADHESIVES. INCREASES MECHANICAL PERFORMANCE, ADHESION TO SURFACES, MAKES THE ADHESIVES HIGHLY DEFORMABLE (C2/S1/S2), DOES NOT ALTER WORKABILITY AND HARDENING TIMES.



TECHNICAL DATA SHEET - REV. 01/2022

DESCRIPTION

ELASTOKOL is an extremely elastic aqueous dispersion polymer. Mixed with cement adhesives, it greatly improves adhesion (even on difficult surfaces), deformability and waterproofing.

FIELDS OF APPLICATION

ELASTOKOL mixed with cement adhesives, in partial or total replacement of the mixing water, greatly increases the mechanical performance such as adhesion, flexibility and resistance to thermal stresses. It is used for indoor and outdoor installations, both on the wall and on the floor, of ceramic tiles of all kinds, ceramic or glass mosaics, porcelain stoneware, clinker, single firing, marble, artificial and natural stones. It is used for laying cladding on external facades exposed to atmospheric agents, on prefabricated concrete walls, inside cold rooms, on concrete structures or floors, on gypsum or fibre cement panels, for laying overlapping on old floors, for laying floors on heating screeds, or on surfaces waterproofed with mineral, anti-alkaline, breathable organic membranes. ELASTOKOL can be mixed with any type of mineral adhesive, such as NEOFIL F 8, SILIKOLL PROGRESS, SILIKOLL, NEOFIL F 50 FLEX, improving performance to meet the requirements defined by standard EN 12004 as described below.

NEOFIL F 8 + ELASTOKOL	C2 S1
SILIKOLL PROGRESS + ELASTOKOL 50%	C2 S1
SILIKOLL + ELASTOKOL	C2 S2
NEOFIL F 50 FLEX + ELASTOKOL 50%	C2 S1

PREPARING THE SURFACE

The surfaces must be sufficiently dry and seasoned, mechanically resistant, planar, solid, compact, free of fragile or inconsistent parts, free of dust, grease, oils, paints, waxes or anything else that may affect the perfect adhesion of the product.

Cementitious surfaces must have already undergone hygrometric shrinkage, which can be assessed in one or two weeks for each centimetre of thickness for plasters and in at least 28 days of overall aging for cementitious screeds, unless they are made with a ready-to-dry screed and compensated shrinkage NEOCEM PRONTO FIBRATO or with special NEOCEM hydraulic binder. The anhydrite screeds must be perfectly hardened, clean, dry (maximum residual humidity 0.5%) and must be treated, after sanding, with an insulating primer made of synthetic resins in aqueous dispersion PRIMER A 16. Very porous, highly absorbent and superficially chalking surfaces must be treated with consolidating impregnating agent RASOTECH PRIMER CONSOLIDANTE, in order to decrease the absorption of the screed and improve the workability of the adhesive.

APPLICATION

ELASTOKOL can totally or partially replace the mixing water of the adhesives, depending on the elasticity or impermeability required. When used diluted (maximum 50%), prepare separately a mixture containing a part of ELASTOKOL and a part of clean water. When preparing the mixture, mix a 25 kg bag of adhesive in roughly 7.5 litres of liquid and mix until a homogeneous and lump-free paste is obtained. Allow the mixture to rest for 5-10 minutes,

stirring briefly before use. This mixture remains workable for 6-8 hours. Apply an initial thin layer of the adhesive with a spatula on the smooth side to ensure effective adhesion and regulate water absorption; then apply the quantity of adhesive necessary to ensure complete wetting of the back of the tile using a toothed spatula with suitable teeth. The tiles should be laid by applying suitable pressure to ensure contact with the adhesive. The open time of the adhesives mixed with ELASTOKOL, under the same environmental conditions, is reduced compared to the basic product. Always be careful that the adhesive applied to the surface is consistently fresh and has not formed a surface film. If it has formed, refresh the adhesive by spreading it again with the toothed spatula. Unfavorable weather conditions such as direct sunlight or excessive ventilation can greatly affect processing times, drastically lowering them. In these conditions it may be useful to moisten the cement surfaces before applying the adhesive to lengthen the open time.

For large-format tiles, for outdoor installations or in very humid environments, for environments subject to intense traffic, for floors to be smoothed on site or subject to heavy loads, spread the adhesive on the reverse side of the tiles as well (double-buttering technique), to avoid gaps remaining which could cause breakage or detachment due to the pressure of concentrated loads or frost. The execution of the joints can be carried out after roughly 6 hours for coatings and after roughly 24 hours for floors. The surfaces can be put into service after 7-14 days depending on the environmental conditions.

YIELD

1 - 1,5 kg/m².

RECOMMENDATIONS

- ◆ FROST SENSITIVE.
- ◆ Store above +5 °C.
- ◆ Protect the coating from rain, runoff, direct sunlight and frost for at least 24 hours or until the product is completely hardened.
- ◆ Wash with water all the tools used for the preparation and application of the product before it hardens. After gripping, the mortar can only be removed mechanically.

PACKAGING

ELASTOKOL is supplied in 25 L drums and 5 L cans. Store in dry environments, in the original packaging well closed and protected from frost. Under these conditions its stability is at least 12 months.

SAFETY INSTRUCTIONS

Consult the Safety Data Sheet for more information to use the product safely.

ITEM SPECIFICATIONS

Polymeric elasticizing latex to be mixed in total or partial replacement of mixing water with mineral adhesives to increase mechanical performance, adhesion to substrates and to make adhesives highly deformable, such as **ELASTOKOL** by Colmef Srl.

TECHNICAL DATA

Appearance:	fluid liquid
Colour:	white
Apparent specific weight (kg/l):	1.02
Solid residue (%):	37
Mixing ratio:	7.5 litres of ELASTOKOL per 25 kg of powder
pH value:	7
Working temperature:	-30 °C to +90 °C
Permissible application temperature:	from +5 °C to +35 °C

FINAL PERFORMANCE OF NEOFIL F 8 MIXED WITH ELASTOKOL

	Results	Reference standard
Initial adhesion after 28 days (N/mm ²):	≥ 1.0	EN 12004
Adhesion after heat action (N/mm ²):	≥ 1.0	EN 12004
Adhesion after immersion in water (N/mm ²):	≥ 1.0	EN 12004
Adhesion after freeze/thaw cycles (N/mm ²):	≥ 1.0	EN 12004
Deformability (mm):	> 5 (highly deformable)	EN 12004

FINAL PERFORMANCE OF NEOFIL F 50 FLEX MIXED WITH ELASTOKOL (50%)

	Results	Reference standard
Initial adhesion after 28 days (N/mm ²):	≥ 1.0	EN 12004
Adhesion after heat action (N/mm ²):	≥ 1.0	EN 12004
Adhesion after immersion in water (N/mm ²):	≥ 1.0	EN 12004
Adhesion after freeze/thaw cycles (N/mm ²):	≥ 1.0	EN 12004
Deformability (mm):	> 5 (highly deformable)	EN 12004

DATA DETECTION AT +23°C - 50% R.H. AND IN ABSENCE OF VENTILATION

The information in this bulletin is based on our best experience. We cannot be held liable for any product misuse. We therefore recommend anyone who intends to use this product to assess whether it is suitable for the intended application and to perform preliminary tests in any case. Always refer to the latest updated version of the technical data sheet available at www.colmef.com.

FOR MORE INFORMATION OR PARTICULAR USES, CONTACT THE COLMEF TECHNICAL SUPPORT DEPARTMENT.

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