

S&P Tecnogrout-K

Structural repair mortar



A Simpson Strong-Tie® Company

The information in this technical data sheet is valid for the S&P range of products, systems and solutions.
Please note that the information in your country may vary. Visit sp-reinforcement.eu to find your local branch.

DESCRIPTION

S&P Tecnogrout-K is a non-shrinkage, thixotropic and sulphate resistant repair construction grout. It is based on mineral products, is ready to use and can be applied by trowel or spatula for use in concrete repair, reinforcement, restoration and refurbishment.

Due to the product's high adherence, installation is possible onto any surface, e.g. concrete, ceramic, stone etc. Also, the watertightness properties of the product protect the substrate from various forms of attack.

WHERE TO USE

- Reinforcement and repair of concrete structures
- Placing of ceramic tiles
- Filling of wall grooves and pigtails
- Repairing of prefabricated elements: chips, honeycombs, cracks, etc
- Finishing of rough concrete surfaces
- Rendering of façades, swimming pools and basements
- Setting of metallic plates
- Roadways at water treatment plants
- Repair of walls and exposed concrete

PERFORMANCE FEATURES

- Non-shrinking (slight expansion)
- Water-resistant
- Unaffected by various atmospheric agents
- Sulphate-resistant
- Chloride free
- Monolithic adherence to concrete
- Stable against hydrocarbons and specific chemical compounds
- Good chemical resistance to seawater, wastewater, sulphates

GENERAL FEATURES

PRODUCT DATA

Generic description

S&P Tecnogrout-K

Size

25 kg bags

40 x 25 kg bags per pallet

Storage

12 months in original unopened sealed bags in a dry and cool place



S&P Tecnogrout-K conforms to EN 1504-3

MECHANICAL PROPERTIES

Property	Test method	Minimum requirement according to EN 1504-3, R3 mortar	Value
Bulk density (powder)	-	-	1.8 kg/dm ³
Hardened density	EN 12190	-	~ 2.15 kg/dm ³
Maximum aggregate size	-	-	1 mm
Water dosage per 25 kg bag	-	-	13-15 % / 3.25-3.75 litres
Consumption	-	-	~ 19.5 kg/m ² per cm thickness
Application thickness	-	-	3-30 mm (50 mm in small areas)
Pot life	-	-	60 minutes at 20 °C
Hardening time	-	-	~ 2 hours
Application temperature	-	-	5 to 35 °C
Compressive strength	EN 12190	≥ 25 MPa	> 7 MPa (1 day)
			> 25 MPa (7 days)
			> 30 MPa (28 days)
Flexural tensile strength	EN 12190	-	> 1.5 MPa (1 day)
			> 5.0 MPa (7 days)
			> 6.0 MPa (28 days)
E-Modulus	EN 13412	≥ 15000 MPa	> 15000 MPa
Water absorption	EN 13057	≤ 0.5 kg/m ² h ^{0.5}	< 0.5 kg/m ² h ^{0.5}
Carbonation resistance	EN 13295	dK < MC(0.45)	Pass
Adhesion to concrete	EN 1542	≥ 1.5 MPa	> 1.5 MPa
Bond strength after 50 freeze-thaw cycles	EN 13687-1	≥ 1.5 MPa	> 1.5 MPa
Chloride ion content	EN 1015-17	≤ 0.05 %	< 0.05 %
Shear strength	EN 1052-3	-	> 6.0 MPa

Above test results are carried out at +20 °C and 65 % RH mixing with 13 % water unless otherwise stated.

APPLICATION

Substrate preparation:

Mechanically abrade concrete surface to completely remove debris and loose particles. Wet the surface until complete saturation is achieved and allow standing water to either evaporate or be absorbed into the substrate. Alternatively, remove standing water using a sponge.

Mixing:

Mix the mortar either by hand or in a concrete mixer, adding 13-15 % of water (3.25-3.75 litres per 25 kg bag). Mix until completely lump-free, ensuring that a homogenous mix is achieved.

Application:

Apply the mortar by means of trowel or spatula, or alternatively pouring the mortar onto the concrete substrate. Finish the surface to the required roughness grade. In case a bonding agent is required, it is recommended to consult our Technical department.

Curing:

Once the mortar is installed, surfaces must be kept damp for at least 10-12 hours, in order to prevent superficial dehydration of the cement.

TESTING

Please contact us if you require any information regarding tests that have been conducted. Test reports may be available.

CLEANING

Tools cleaning

Tools and application equipment must be washed immediately after use. If the product hardens, it can only be removed by mechanical means.

CE MARKING

S&P TecnogROUT-K meets the requirements of European Code EN 1504: "Products and systems for the protection and repair of concrete structures - Definitions, requirements, quality control and evaluation of conformity - Part 3: Structural and non-structural repair", for grouts CLASS R3.

HEALTH & SAFETY

Important safety instructions

For detailed safety information, we recommend that you see the current safety data sheet which is available on www.sp-reinforcement.eu or you can contact us on +34 91 802 31 14.

S&P's range of products are for industrial use. They must be installed by specialised personnel and competent professionals with adequate training. The installation instructions must be followed and can be found in S&P application manuals and several "Guideline" documents / existing technical notes.

The information in this product data sheet is valid for products delivered by S&P Reinforcement Spain S.L., Spain. Please note that the information in other countries may differ, and always use the local product data sheet in each respective country. The information and data in this technical data sheet serve to ensure the normal intended use and normal application suitability; the information and data are based on our knowledge and experience. They do not absolve the user from their own responsibility to check the suitability and application method.

The rights to make changes to product specifications are reserved. Furthermore, our general sales and delivery terms apply. The current, most recent product data sheet is valid, and should be requested from us.

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