

S&P Tecnogrout-K

Class R3 fine 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 low-shrinkage, fibre-reinforced repair and finishing fine mortar that meets the requirements of class R3 in accordance with EN 1504-3:2005.

It is suitable for repairing concrete components in building construction and civil engineering and as a levelling layer on masonry and concrete.

WHERE TO USE

- Repair of concrete components in building construction and civil engineering
- Levelling layers on masonry and concrete
- Levelling layers under S&P FRP systems for structural reinforcement
- Repair of prefabricated elements
- Interior and exterior use

PERFORMANCE FEATURES

- Can be applied by hand or wet spraying
- Excellent adhesion to masonry and concrete
- Good processing properties
- Low shrinkage
- Can be applied without bonding bridge
- Resistant to freeze-thaw and thermal cycles
- Resistant to carbonation
- Low capillary absorption

GENERAL FEATURES

PRODUCT DATA

Generic description

S&P Tecnogrout-K

Appearance/Colour

Grey concrete colour

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



This product conforms to EN 1504-3 : 2005.

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 grout 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 grout by means of trowel or spatula, or alternatively pouring the grout onto the concrete substrate. Finish the surface to the required roughness grade.

In case a bonding agent is required, it is recommended to consult to our Technical department.

Curing:

Once the grout 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 +41 41 825 00 70.

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.

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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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