

S&P Tecnoimper-Flex

Flexible waterproof coating



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 Tecnoimper-Flex is a two component waterproof and flexible coating, based on special cements, selected aggregates, additives and emulsified synthetic resins. Once mixed and applied onto concrete substrates, cementitious mortars, etc, it provides waterproof features and allows for small movements due to the flexible properties. The simplicity for its application, as well as its excellent performance make this product highly suitable for construction works of all sorts where the protection of high-quality building structures is the key to project success.

GENERAL FEATURES

WHERE TO USE

- Inner waterproofing of potable water tanks
- Exterior and interior waterproofing of concrete, mortar and masonry structures
- Waterproofing of tunnels, channels, ducts, basements and foundations
- Protection of structural concrete against carbonation
- Waterproofing of elevator shafts and pits
- Waterproofing structures where either negative and/or positive water pressure exists

PERFORMANCE FEATURES

- Tested and approved for use in contact with drinking water according to RD 140/2003 and DL 306/2007
- Allows substrate to transpire, avoiding the risk of condensation
- Protects concrete against carbonation
- Excellent adhesion on sound substrates
- Flexible waterproofing for exteriors and on substrates with small movements
- Weatherproof
- Waterproof
- UV-resistant
- Resistance against positive and negative water pressure

PRODUCT DATA

Generic description

S&P Tecnoimper-Flex

Size

Comp. A - 20 kg bag

Comp. B - 8.4 kg bottle

Storage

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



This product conforms to EN 1504-2:2004

Principles and methods according to EN 1504-9:2008

Principle 1: Protection against Ingress (PI) - Method 1.3: Coating (C)

Principle 2: Moisture Control (MC) - Method 2.3: Coating (C)

Principle 8: Increase Concrete Resistivity (IR) - Method 8.3: Coating (C)



MECHANICAL PROPERTIES

Property	Test method	Minimum requirement according to EN 1504-2	Value
Density (A+B)	EN 12190	-	~ 1.40 kg/l
Maximum aggregate size	EN 12192-1	-	0.5 mm
Consumption	-	-	2.50 to 3.00 kg/m ² (two coats)
Application thickness	-	-	~ 2 mm (two coats)
Pot life	-	-	~ 45 min
Waiting time between coats (hardening time)	-	-	≥ 6 hours
Final curing time	-	-	7 days
Application temperature	-	-	5 °C to 35 °C
Liquid water permeability	EN 1062-3	$w < 0.1 \text{ kg/m}^2\text{h}^{0.5}$	$w < 0.05 \text{ kg/m}^2\text{h}^{0.5}$
Adhesion to concrete	EN 1542	≥ 0.8 N/mm ² (Flexible systems, no traffic loads)	> 1.0 N/mm ² (28 days)
Permeability to CO ₂	EN 1062-6	$S_D > 50 \text{ m}$	$S_D > 50 \text{ m}$
Water vapour permeability	EN ISO 7783	Class I (permeable to water vapour): $S_D < 5 \text{ m}$	Class I $S_D < 3.5 \text{ m}$
Cracking resistance	EN 1062-7	Class A1 > 100 µm Class A2 > 250 µm Class A3 > 500 µm Class A4 > 1250 µm Class A5 > 2500 µm	-10 °C: Class A4 (> 1250 µm) +23 °C: Class A4 (> 1250 µm)
Depth of penetration of water under positive pressure	EN 12390-8	-	No water penetration after 3 days at 3 bar
Depth of penetration of water under negative pressure	EN 12390-8	-	No humidity or water after 3 days at 5 bar
Influence on water intended for human consumption	EN 14944-3	-	Conforms with R.D. 140/2003 & DL 306/2007

Tests were carried out at +21°C ± 2°C and 60 % ± 10 % RH, unless other conditions are required by the specific test standard.

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. Honeycombs and cracks must be repaired before applying the product. Uneven surfaces must also be levelled prior to installation, for example using S&P TecnogROUT-FIB or S&P TecnogROUT-K.

Mixing:

Mix component A (20 kg) with component B (8.4 kg) until completely lump-free, ensuring that a homogenous mix is achieved. To achieve a complete total lump-free mix, we advise mixing all of component A with 80% of component B for about 4 - 5 minutes and finally adding the remaining 20% of component B and mixing for another 1 - 2 minutes.

Application:

Apply the mix by means of brush or trowel in only one direction. Then apply a second coat at a 90 degree angle to the first coat, not retouching it when finishing. Wait at least 6 hours between each coat. Alternatively, the product may be projected using adequate equipment, finishing the coats with a brush or trowel.

Curing:

Should there be a risk of rapid hydration, the surface must be kept wet by means of watering.

Do not apply this product at ambient temperatures below +5 °C or above +35 °C.

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 cleaned with water immediately after use. If the product hardens, it can only be removed by mechanical means.

CE-MARKING

S&P Tecnoimper-Flex meets the requirements of EN 1504: "Products and systems for the protection and repair of concrete structures - Definitions, requirements, quality control and evaluation of conformity - Part 2: Surface protection systems for concrete".

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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