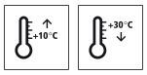
Technical Data Sheet

StoPur AF Plus S

PUR waterproofing under tiles, vertical



Characteristics

Area of application

- for waterproofing constructions in connection with tiles and panel coverings

Properties

- highly elastic
- alkali-resistant
- good non-sag properties on vertical surfaces

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Shore hardness type A	EN ISO 868	77 - 83	7d/RT
Density (mixture 23 °C)	EN ISO 2811	1,36 - 1,44 g/cm³	

The characteristic values stated are average values or approximate values. Due to the natural raw materials in our products, the stated values can vary slightly in the same delivery batch; this does not affect the suitability of the product for its intended use.

Substrate

Requirements

Requirements on the substrate:
Check all reprofiling work for evenness and dimensional accuracy before starting waterproofing work.
Ceramic coverings may only be applied to the waterproofing using the thin-bed method.
Subsequent thick-layer levelling is not permitted unless agreed in advance with the StoCretec Technical Info-Center (0 61 92/401-104).

The substrate must be dry, load-bearing, and free from native and foreign release agents. Remove weak layers and laitance.

Dry in accordance with the definition of the DAfStb (German) Repair Guideline 2001-10, but depending on the compressive strength class. The moisture content may not exceed 4 CM per cent for concrete qualities up to C30/37 and max. 3 CM per cent for C35/45 concrete, measured with a calcium carbide meter.

Substrate temperature higher than +10 °C and 3 K above dew point.
Average bond strength: 1.5 N/mm²
Bond strength, lowest single value: 1.0 N/mm²

Preparations

Substrate preparation:

Prepare the substrate using a suitable mechanical process such as shot-blasting, milling and then shot-blasting, or abrasive blasting.

Application

Application temperature	Lowest application temperature: +10 °C Highest application temperature: +30 °C
Time for application	At +10 °C: approx. 45 minutes At +23 °C: approx. 30 minutes At +30 °C: approx. 15 minutes
Mixing ratio	component A : component B A : B 100.0: 16.0 parts by weight
Material preparation	Component A and Component B are supplied in the correct mixing ratio and should be mixed in accordance with the following instructions. Stir component A, then add all of component B. Mix thoroughly with a slow-running paddle mixer (max. 300 rpm) until a homogeneous, streak-free compound develops. It is also vital to stir thoroughly at the sides and the bottom in order to evenly distribute the hardener. Mixing time is at least 3 minutes. After mixing, pour the compound into a clean container and mix again. Do not apply from the delivery container! The temperature of the individual components must be at least +15 °C when mixing.

Consumption

Type of application	Approx. consumption	
as waterproofing	2,0	kg/m²

Material consumption depends on the application, substrate, and consistency, among other factors. The stated consumption values are only to be used as a guide. If required, determine precise consumption values on the basis of the specific project.

Coating build-up

Substrate: concrete
1. Substrate preparation
2. Priming coat of StoPox 452 EP
3. Stipple filling (optional) StoPox 452 EP with Sto Aggregate KS

Substrate: metal
1. Substrate preparation
2. Priming coat with StoPox ZNP in alternating colour shades (sand-yellow, red-brown)
Substrate: plastic

1. Substrate preparation
2. Priming coat with StoPur VS 70 in two application cycles

Coating of vertical surfaces with StoPur AF Plus S in two application cycles

Application

Substrate: concrete
1) Substrate preparation

2) Prime coating
Apply StoPox 452 EP by rolling.
Apply StoPox 452 EP primer in one or more layers depending on the substrate.
Consumption: approx. 0.2 - 0.4 kg/m², depending on the absorption capacity of the substrate.
Scatter with StoQuarz 0.1 - 0.5 mm
consumption: approx. 0.5 - 1.0 kg/m²

3) Scratch coat (optional)
Apply a scratch coat consisting of 1 part by weight of StoPox 452 EP and up to 3 parts by weight of StoZuschlag KS (possibly adding StoDivers ST filling agent) on to the prepared and primed substrate.
Apply the product using a smoothing trowel or a squeegee.
Consumption of StoPox 452 EP: approx. 1.0 kg/m² at a layer thickness of 2 mm
Consumption of StoZuschlag KS: approx. 3.0 kg/m² at a layer thickness of 2 mm
Scatter with StoQuarz 0.3 - 0.8 mm
Consumption of StoQuarz 0.3 - 0.8 mm: approx. 6 kg/m²

Substrate: metal
1) Substrate preparation

2) Prime coating
Immediately after substrate preparation, apply the first substrate coating of StoPox ZNP (sand-yellow) using a paint brush or roller.
Consumption of StoPox ZNP: approx. 0.25 kg/m²

On the next day, apply a second substrate coating of StoPox ZNP (red-brown) using a roller, and within the next 10 minutes scatter StoQuarz 0.1 - 0.5 mm kiln-dried quartz sand over it.
Consumption of StoPox ZNP: approx. 0.25 kg/m²
Consumption of StoQuarz 0.1 - 0.5 mm: approx. 0.5 kg/m²

Substrate: plastic (test adhesion and compatibility on a sample area)
1) Substrate preparation

2) Prime coating
Apply StoPur VS 70 in two application cycles using a roll or by airless spray-gun.
Consumption of StoPur VS 70: max. 0.1 kg/m² and layer
Scatter with StoQuarz 0.1 - 0.5 mm

Consumption of StoQuarz 0.1 - 0.5 mm: approx. 0.5 kg/m²

Sealing built-in parts.
Transition areas, built-in parts or sealing flanges must be pasted over with StoSeal Adhesive Sealing Tape prior to coating. Paste over the joint chambers of connection joints in loops after priming with StoSeal Adhesive Sealing Tape 10 cm wide. Rework the areas processed in this way with StoPur AF Plus S.

Coating of the above-mentioned substrates:
Vertical surfaces in two application cycles
Apply StoPur AF Plus S in a web pattern in the first application cycle with a toothed trowel (toothing 23 = toothing 1.5 mm).
Apply the second application cycle full-surface with the smoothing trowel within the waiting time of 16 - 24 hours.
Total consumption: approx. 2.0 kg/m²
Finally, intersperse or blow in StoQuarz 0.3 - 0.8 mm.
Consumption: approx. 0.5-0.8 kg/m²

Cleaning the tools	Clean with StoDivers EV 100 immediately after use.
Notes, recommendations, special information, miscellaneous	Installing and pointing ceramic coverings Minimum waiting time until laying: > 3 days (+23 °C) Lay tiles using the thin-bed method with Sopro tile adhesives and pointing mortars tested within the system: -Sopro Dünnbett Epoxi -Sopro Flex Klebe Mörtel schnell -Sopro Flex Klebe Mörtel Choose the system depending on the tile type and stress after consulting Sopro GmbH, Wiesbaden, tel. +49 611 1707-111 General application instructions are available at www.stocretec.de and in the notes of the latest Technical Manual.

Delivery

Colour shade white

Article number	Name	Container
14190/010	StoPur AF Plus S Set	5 kg set

Storage

Storage conditions	Store in dry and frost-free conditions. Protect from direct sunlight.
Storage life	In the original container until ... (see packaging).

Technical Data Sheet

StoPur AF Plus S

Identification

Product group	Waterproofing
GISCODE	x
Safety	This product is subject to compulsory labelling in accordance with the current EU regulation. You will receive an EU Safety Data Sheet with your first order. Please observe the information regarding the handling of the product, its storage, and disposal.

Special notes

The information in this Technical Data Sheet serves to ensure the product's intended use, or its suitability for use, and is based on our findings and experience. Users are nevertheless responsible for establishing the product's suitability and use.
Applications not specifically mentioned in this Technical Data Sheet are permissible only after prior consultation. Where no approval is given, such applications are at the user's own risk. This applies in particular when the product is used in combination with other products.

When a new Technical Data Sheet is published, all previous Technical Data Sheets are no longer valid. The latest version is available on the Internet.

StoCretec GmbH
Gutenbergstr. 6
D-65830 Kriftel

Tel.: +49 6192 401-104
Fax: +49 6192 401-105
stocretec@sto.com
www.stocretec.de