StoCrete PU 105

Preparatory filler and levelling layer under PUR mortars







Characteristics	
Area of application	 interior as a preparatory filler and levelling layer under the products StoCrete PU 205, StoCrete PU 255, and StoCrete PU 285 on mineral substrates, e.g. concrete and cementitious screed
Properties	 preparatory filler on a PUR base water-based, environmentally friendly, PUR binding agent solvent-free odour-free, flavour is not transferred to food not harmful to the environment during application component C: cementitious very good bond on mineral substrates meets the requirements of HACCP thermal compatibility
Appearance	• colourless
Information/notes	the product is in accordance with DIN EN 13813

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Water absorption	EN 1062-3	< 0,01 kg/m²	
Compressive strength	EN ISO 196 / ASTM C109	> 38 MPa	
Flexural strength	EN ISO 196 / ASTM C109	> 18 MPa	
Viscosity (at 23 °C)		1.700 mPa.s	
Shore hardness type D	EN ISO 868	68	
Density (23 °C)	EN ISO 2811-2	1,65 g/cm ³	
Water absorption coefficient Aw	EN 1062-3		w < 0.1 kg / (m²*h0.5)
Non-volatile content		99 %	



StoCrete PU 105

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:

- Dry, load-bearing
- Free from separating, native, or foreign substances
- Remove all weak layers.
- Dry according to the definition contained in the DAfStb (German) Repair Guideline, issue 2001-10.
- Bond strength: at least 1.5 N/mm²

Suitable substrates:

Prerequisite: Substrates have been professionally installed and prepared.

A) Monolithic concrete

- Compressive strength class: at least C25/30 in accordance with DIN EN 206-1, in accordance with DIN 1045-1
- Except lightweight concrete

B) Polymer-modified cementitious screed

- Smoothed by machine in a bond
- Compressive strength class: at least CT-C30 in accordance with DIN 18560, in accordance with DIN EN 13813
- Minimum layer thickness: > 25 mm

C) Polymer-modified screed on a separating layer

- Reinforced, smoothed by machine
- Compressive strength class: at least CT-C40 in accordance with DIN 18560, in accordance with DIN EN 13813
- Minimum layer thickness: > 75 mm

D) Load-bearing coatings already available:

- StoCrete PU 205
- StoCrete PU 255
- StoCrete PU 285

The following substrates are not suitable:

- A) Screeds with low strengths, bituminous substrates, magnesium screeds, and anhydrite screeds
- B) Bricks, tiles, cellular concrete, wood
- C) Galvanised steel and stainless steel, non-ferrous heavy metals, aluminium
- D) All existing coatings, except StoCrete PU 205, StoCrete PU 255, StoCrete PU 285
- E) E.g. polyethylene, sheeting, vapour barriers

Preparations

1) Prepare all the above-mentioned substrates using a mechanical method, see



StoCrete PU 105

"Substrate, requirements".

2) Observe the implementation instructions.

Application	
Application temperature	permissible substrate temperature: minimum temperature: +12 °C
	permissible application temperature: minimum temperature: +12 °C Maximum temperature: +30 °C
Time for application	at +20 °C: 10-15 minutes
Mixing ratio	component A : component B : component C A : B : C 8 : 8 : 21 Recommendation: -Mix the entire delivery containerDo not process partial amounts.
Material preparation	Notes: - The mixing equipment should be placed as close as possible to the workplace. - The material temperature is between +15 °C and +25 °C. - The temperature of all components is between +15 °C and +25 °C. - Observe the order of the "Preparing material" steps.
	Mixing time: - Length of mixing time approx. 3 minutes after addition of last reactive component (filler comp. C) Mix each container for the same length of time.
	Possible consequences if mixing times are too long or too short: - The aggregates are hard to distribute. - The product has poorer flowability. - Too many trowel marks are visible. - Very small holes and bubbles form in the cured layer. - A wavy surface develops.
	Components: - Component A and component B: for mixing the primer - Component C: as filler - Use all of the components.
	Preparing material: 1) Fill component A and component B into the mixing container. 2) Mix the components.



StoCrete PU 105

- 3) Ensure the the mixing equipment covers the floor areas and the edge zones of the mixing container.
- 4) Add component C and mix until the filler has dispersed well and the mix is homogeneous.

Consumption

Type of application	Approx. consum	nption
normal absorbent substrates	0,8 - 1,2	kg/m²
levelling layer consumption	1,9	kg/m²/mm

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

coating build-up A: StoCrete PU 205, smooth surface

- layer thickness of the coating build-up: approx. 4-6 mm
- 1) Prepare the substrate.
- 2) Mill the recesses in the substrate.
- 3) Priming: StoCrete PU 105, component A, B, C
- 4) Coating: StoCrete PU 205, component A, B, C, D

coating build-up B: StoCrete PU 205, slip-resistant surface

- layer thickness of the coating build-up: approx. 5-7 mm
- 1) Prepare the substrate.
- 2) Mill the recesses in the substrate.
- 3) Priming: StoCrete PU 105, component A, B, C
- 4) Coating: StoCrete PU 205, component A, B, C, D
- 5) Scatter: StoQuarz 0.3-0.8 mm
- 6) Sealing: StoCrete PU 290, component A, B, C, D

Application

Notes:

- permissible substrate temperature: +12 °C
- StoCrete PU 205 has high residual stress.

For this reason, anchoring incisions must be milled into the substrate for anchoring the first layer.

Observe the implementation instructions.

- Tools required: pin leveller and floor squeegee
- application on dry mineral substrates

coating build-up A: StoCrete PU 205, smooth surface

- 1) Prepare the substrate.
- 2) Mill the anchoring incisions into the substrate.
- 3) Priming:
- StoCrete PU 105, component A, B, C
- roughness depth: 0.5-1 mm on normal absorbent mineral substrates
- Consumption: approx. 0.8–1.2 kg/m² plus 150–200 g/lfm material consumption



StoCrete PU 105

for anchoring incisions in substrate

- 4) Coating:
- StoCrete PU 205, component A, B, C, D
- coverage: approx. 7-12 kg/m²

coating build-up B: StoCrete PU 205, slip-resistant surface

- 1) Prepare the substrate.
- 2) Mill the recesses in the substrate.
- 3) Priming:
- StoCrete PU 105, component A, B, C
- roughness depth: 0.5-1 mm on normal absorbent mineral substrates
- Consumption: approx. 0.8–1.2 kg/m² plus 150–200 g/lfm material consumption for anchoring incisions in substrate
- 4) Coating:
- StoCrete PU 205, component A, B, C, D
- Consumption: approx. 7-11 kg/m²
- 5) Scatter:
- Scatter StoQuarz 0.3-0.8 mm full-surface so that no gaps remain.
- Consumption: approx. 5-6 kg/m²
- 6) Sealing:
- StoCrete PU 290, component A, B, C, D
- coverage: approx. 0.8–1.0 kg/m², depending on the desired roughness Note:

Other scatter sand and coverage quantities may be required, depending on the required skid and slip resistance (consult TSC).

Note:

the appearance of the surface may change under the following conditions:

- The covering is exposed to strong light.
- The covering is exposed to thermal and chemical strain.
- The technical properties of StoCrete PU 205 are not impaired.

Approve the covering:

- At an ambient temperature and substrate temperature of +20 °C, the system develops its maximum chemical resistance after 5 days.
- The covering can be released for people to walk on after 12 hours and for vehicles after 2 days.

Cleaning the tools

Clean tools with StoDivers EV 100 or StoCryl VV.

Notes, recommendations, special information, miscellaneous

Observe the implementation instructions.1) Observe the general application instructions:

- see www.stocretec.de, Products
- see technical manual, notes
- 2) Observe the implementation instructions.

Please observe our general application guidelines for StoCretec PU systems.



StoCrete PU 105

StoCretec PU products should only be applied by trained personnel.

Delivery			
	Article number	Name	Container
	09708/001	StoCrete PU 105 Set	37 kg set
	09710-002	StoCrete PU 105/205/255 Comp. C	21 kg bag
	09709-001	StoCrete PU 105 Comp. B	8 kg pail
	09708-001	StoCrete PU 105 Comp. A	8 kg can
Storage			
Storage conditions	Dry in a well-ventilated room without any sources of heat for 6 months, temperature: between +5 °C and +30 °C		
Storage life	The product quality is best guaranteed in its unopened original container until its shelf life has expired. The first digit of the batch number is the final digit of the year. The second and third digits indicate the calendar week. Example: 1450013223 - shelf life until end of calendar week 45 in 2021. In the original container until (see packaging).		

Identification	
Product group	Primer
GISCODE	x
Safety	This product is subject to compulsory labelling in accordance with the current EU regulation. Observe the Safety Data Sheet!

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.



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