

Technical Data Sheet

StoCrete PCR

One component, polymer modified standard structural repair mortar



Characteristics

- Area of application**
- For horizontal, vertical and overhead patching of spalled concrete
 - To repair concrete in accordance with Sto Repair Systems

Properties

- Ease of use requiring only addition of water
- Low permeability giving optimum protection to steel reinforcement from chlorides ingress
- Shrinkage compensated for large application
- High bond strength to parent concrete
- Application thickness of approximately 10 – 40 mm vertical and 10 – 25 mm overhead achieved in one operation
- Good workability and water retentively preventing dry out phenomena
- Suitable for both interior and exterior applications

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Criteria	Standard / test specification	Value / Unit	Notes
Compressive Strength @ 28 days	ASTM C109/ C109M: 2020b	> 40.0 N/mm ²	
Flexural Strength @ 28 days	ASTM C580:2018	> 7.0 MPa	
Modulus of Elasticity @ 28 days	ASTM C580:2018	> 7.0 GPa	
Slant Shear Bond Strength @ 28 days	BS EN 12615: 1999	> 7.0 N/mm ²	Type 1
Volume Change	ASTM C827/ C827M: 2016		
@ 3 days		0.1 %	
@ 28 days		0.1 %	
Water Absorption @ 28 days	ASTM C413: 2018	< 1.0%	

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

Preparation

1. Ensure that the concrete surface to be repaired is sound and free from dirt, oil, laitance and any other deleterious substances.
2. Edge of repair area should be recessed to a depth of 5 mm to prevent feather edging.

Application

Application temperature

Lowest application temperature: +8°C
 Highest application temperature: +45°C

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Material Preparation	<ol style="list-style-type: none"> 1. StoCrete PCR must be mixed in a forced action pan mixer or with a slow speed drill (500rpm) fitted with a spiral paddle.. 2. Pour 4.4 – 4.6 litres of water into a mixing container. 3. Add StoCrete PCR into the water slowly and mix for at least 3 – 4 minutes until an even trowellable plastic consistency is obtained. 	
Consumption	Type of application	Approximately
	Yield	0.0130 - 0.0135 m ³ / 25kg bag
	Consumption	1.8kg/m ² per mm layer thickness
<p>Material consumption/mix design 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.</p>		
Application method	Apply using steel trowel	
Application Procedure	<u>Priming</u>	
	<ol style="list-style-type: none"> 1. All exposed reinforcement bars must be cleaned and treated with Sto anti-corrosion primer. 2. Saturate the area to be repair with water and remove any excess. 3. Prime the repair area with Sto bonding agent. 	
	<u>Placing</u>	
	<p>StoCrete PCR should be applied while the bonding agent is still tacky. Apply StoCrete PCR using a steel trowel from the recessed edge to the recommended thickness. Thicker layers should be applied in a few operations. StoCrete PCR should be allowed to partially set before finally trowelling to a smooth finish.</p>	
<u>Setting time</u>		
Initial set		3.5 – 5 hours
Final set		5.5 – 7 hours
Cleaning the tools	Tools must be cleaned immediately after use with clean water. Hardened materials can only be removed mechanically.	
Notes, recommendations, special information, miscellaneous	Please consult the local sales office for further information and any site assistance required.	
Delivery		
Packaging	Name	Packing
	StoCrete PCR	25 kg
Storage		
Storage conditions	Store in cool dry conditions; avoid direct sunlight.	
Storage life	This product has a shelf life of 12 months from the manufacturing date.	

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Identification

Product group Mortar and Grout

Safety Please refer to 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 www.sto-sea.com.

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*Product images may differ from the actual product.