

Epoxy resin coating, tested and approved water protection systems





Characteristics					
Area of application	 Interior and exposed to As coloured coating for (HBV surfaces) with me As a top coating in the system 1 a (Z-59.12.31) 	weathering industrial flooring echanical and chemical stress StoCretec WHG system 1 (Z-5 0)	59.12.309) and StoCre	etec WHG	
Properties	 Very high chemical-res Tested slip resistance Crack-bridging up to 0. and 0.5 mm (according Suitable for vehicle traf Sensitive to humidity w 	istance 4 mm (according to the nation to a separate test report with fic with Vulkollan and polyami hile curing	al technical approval) out national technical de wheels	and 0.2 mm approval)	
Information / notes	 Product is in accordance For water pollution prof It is possible that some direct sunlight 	ce with EN 13813 tection according to § 62 WHC yellowing might occur in inter	G ior or exterior areas e	exposed to	
Technical data					
	Criteria	Standard / test specification	Value / Unit	Notes	
	Bond strength (28 days)	EN 1542	> 2.0 N/mm ²		
	Viscosity (at 23 °C)	EN ISO 3219	1,160 – 1.740 mPa.s	mixture	
	Shore hardness type D	DIN 53505-D/EN ISO 868	72 - 78		
	Density (mixture 23 °C)	EN ISO 2811	1.16 - 1.24 g/cm ³		
	The characteristic values natural raw materials in ou delivery batch; this does r	stated are average values or a ur products, the stated values not affect the suitability of the p	approximate values. I can vary slightly in the product for its intende	Due to the e same d use.	
Substrate					
Requirements	The substrate must be dry Remove weak layers and	/, load-bearing, and free from laitance.	native and foreign rel	ease agents.	
	Dry in accordance with the definition of the DAfStb (German) Repair Guideline 2001-10, but depending on the compressive strength class. Residual moisture may amount to max. 4 % by weight for concrete in strength classes up to C30/37 and max. 3 % by weight for C35/45 concrete, measured with a calcium carbide meter.				
	Substrate temperature higher than +8 °C and 3 K above dew point. Averag 1.5 N/mm²				
	I owest single bond strend	th value 1.0 N/mm²			
	Lowest single bond streng				



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: +8°C and a max. of 75% relative humidity Highest application temperature: +30°C and a max. of 80% relative humidity		
Processing time	At +10°C: approx. 60 minutes At +23°C: approx. 25 minutes At +30°C: approx. 15 minutes		
Mixing ratio	Component A : Component B = 100.0 : 50.0 parts by	weight	
Material preparation	Component A and Component B are supplied in the accordance with the following instructions. Stir comp	correct mixing ratio onent A, then add a	and mixed in Il of component B.
	Mix thoroughly with a slow-running stirrer (maximum streak-free compound develops. It is also vital to thor ensure the hardener is uniformly distributed. Mixing t	300 rpm) until a ho oughly stir at the sid ime at least 3 minut	mogeneous, des and bottom to es.
	After mixing, pour the compound into a clean contain Do not apply from the delivery container!	er and mix again.	
	The temperature of the individual components must b	be at least +15°C w	hen mixing.
Consumption	Type of application	Approx. consur	nption
	as top coat (crack bridging up to 0.4 mm, national technical approval)	2.5	kg/m ²
	as top coat (0.2 mm crack bridging)	1.8	kg/m ²
	as top coat (0.5 mm crack bridging))	3.0	kg/m ²
	Material consumption depends on the application, sub factors. The stated consumption values are only to be determine precise consumption values on the basis o	ostrate, and consiste e used as a guide. I f the specific projec	ency, among other lf required, ct.
Coating build-up	 Sto Cretec WHG System 1 1. Substrate preparation 2. Prime coating of StoPox WHG Grund 100 3. Scratch coat of StoPox WHG Grund 100 (optional 4. Coating of StoPox WHG Deck 100 StoCretec WHG System 1 a (slip-resistant build-up) 1. Substrate preparation 2. Prime coating of StoPox WHG Grund 100 3. Scratch coat of StoPox WHG Grund 100 3. Scratch coat of StoPox WHG Grund 100 4. Coating of StoPox WHG Deck 100 5. Intermediate coat of StoPox WHG Deck 100 6. Scattering of StoQuarz 0.6 - 1.2 mm 7. Sealing coat of StoPox WHG Deck 100)	



Application	1.0 S	StoCretec WHG System 1 (Z-59.12-309)
	1	.1. Substrate preparation
	1	 .2. Prime coating Flood apply StoPox WHG Grund 100 with a foam rubber squeegee until the substrate is totally free of pores, and then evenly spread it by rolling. Avoid forming puddles
		Consumption: approx. 0.3 - 0.5 kg/m ² , depending on the roughness of the substrate
		Rework in accordance with the time period indicated in the national technical approval. Do not scatter beforehand. In outdoor areas, sand the prime coating before applying the next coating.
	1	 .3. Scratch coat (for large substrate roughness) Fill StoPox WHG Grund 100 with mixture 1:1 parts by weight of StoQuarz 0.1 - 0.5 mm and StoQuarz 0.01 mm. Apply the material using a smoothing trowel/squeegee with triangular notching and de-air with a spiked roller. Add StoDivers ST thixotropic additive if required.
		Consumption: StoPox WHG Grund 100 approx. 0.6 - 0.7 kg/m ² per mm layer thickness
		Consumption: quartz sand mixture made of StoQuarz 0.1 - 0.5 mm and StoQuarz 0.01 mm approx. 0.6 - 0.7 kg/m ² per mm layer thickness
		Determine the exact amount of thixotropic additive required at the project, depending on the temperature and slope of the surface.
	1	 .4. Coating Apply the material using a notched trowel/squeegee with triangular notching or rubber squeegee with coarse notching, and de-air with a spiked roller (notching 78 or 92, Sto tool catalogue).
		Consumption: approx. 2.5 kg/m ² Observe the consumption quantities as exactly as possible and check at regular intervals during coating
2	2.0 5	StoCretec WHG System 1a (slip-resistant build-up, Z-59.12-310)
	2	2.1. Substrate preparation
	2	 Prime coating Flood apply StoPox WHG Grund 100 with a foam rubber squeegee until the substrate is totally free of pores, and then evenly spread it by rolling. Avoid forming puddles
		Consumption: approx. 0.3 - 0.5 kg/m ² , depending on the roughness of the substrate.
		Rework in accordance with the time period indicated in the national technical approval without prior scattering. In outdoor areas, sand the prime coating before applying the next coating.



- 2.3. Scratch coat (for large substrate roughness)
 - Fill StoPox WHG Grund 100 1 : 1 parts by weight with StoQuarz 0.1 0.5 mm and StoQuarz 0.01 mm. Apply the mixture using a smoothing trowel/squeegee with triangular notching and de-air with a spiked roller. Add StoDivers ST thixotropic additive if required.

Consumption: StoPox WHG Grund 100 approx. 0.6 - 0.7 kg/m² per mm layer thickness

Consumption: quartz sand mixture made of StoQuarz 0.1 - 0.5 mm and StoQuarz 0.01 mm approx. 0.6 - 0.7 kg/m² per mm layer thickness

Determine the exact amount of thixotropic additive required at the project, depending on the temperature and slope of the surface

- 2.4. Coating of StoPox WHG Deck 100
 - Apply the material using a notched trowel/squeegee with triangular notching or a rubber squeegee with coarse notching, and de-air with a spiked roller (notching 78 or 92, Sto tool catalogue)

Consumption: 2.5 kg/m²

Observe the consumption quantities and check at regular intervals during coating.

After approx. 24 hours, apply StoPox WHG Deck 100 as an intermediate coat. Before applying the intermediate coat, gently roughen coating number 4 using a medium hard, slightly abrasive pad.

- 2.5. Intermediate coat
 - Use a notched trowel to spread the material while kneeling. Adding approx. 5 % quartz sand 0.3 - 0.8 mm makes application easier. Scrape the material sharply over the grain.

Consumption approx 500 - 600 g/m²

- 2.6. Scattering
 - Scatter the intermediate coat with StoQuarz 0.6 1.2 mm by throwing the sand from above so that it lies grain by grain. Do not throw in from the side!

Consumption approx 800 - 1000 g/m²

Sweep or suction cleans the surplus unbound sand.

- 2.7. Sealing coat
 - Apply StoPox WHG Deck 100 as a top coat using a soft double-lipped foam rubber squeegee under pressure and re-roll

Consumption approx 300 - 400 g/m²



- 3.0 Application on vertical surfaces :
 - 3.1 Fille nd levellin

	 3.1. Filler and levelling coat StoPox WHG Grund 100, filling degree 1 : 1 parts by weight with StoQuarz (StoQuarz 0.01 mm/StoQuarz 0.1 - 0.5 mm), adding approx. 4 wt% StoDivers ST. 	
	Consumption of StoPox WHG Grund 100: approx. 500 g/m ² Consumption of StoQuarz 0.01 mm: approx. 250 g/m ² Consumption of StoQuarz 0.1 - 0.5 mm: approx. 250 g/m ²	
	 3.2. Coating For application on vertical surfaces, add up to max. 4 wt% thixotropic additive to StoPox WHG Deck 100 at an ambient room temperature. 	
	Several application cycles may be necessary to achieve the required consumption rate.	
	Note: Full mechanical and chemical loading capacity: after 7 days. Depending on exposure to chemicals, discolourations can occur. These do not, however, impair the technical function of the coating.	
	Slight deviations in the colour shade are possible between different batches. Any yellowing which occurs under UV stress does not have any effect on the technical properties of the coating.	
	Observe the information on consumption, application, and execution in the national technical approvals!	
Drying, curing, ready for next coat	Reworking time :- At +10°C: approx. 24 h At +23°C: approx. 18 h At +30°C: approx. 12 h	
Cleaning the tools	StoCryl VV / StoDivers EV 100	
Delivery		
Colour shade	Limited colour choice	
Packaging	30 kg set	
Storage		
Storage life & conditions	This product has a shelf life of 12 months from the manufacturing date.	
	Product should always be stored in an unopened bag, dry place, protected from rain, direct sunlight and raised off the floor.	



Special notes	
Health & Safety	Please refer to Safety Data Sheet
Technical Support	Please consult the local sales office for further information and any site assistance required.
	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.
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