

Project Report/February 2022

Quartier of Wydenbrueck with StoCretec System solutions and StoDesign Interior Colour Concept

The underground car park of the "Quartier von Wydenbrueck", which was completed in Paderborn, Germany, at the end of 2021, impressively combines the Middle Ages and the modern age: the five-storey residential and commercial building has an underground car park with 39 parking spaces for tenants and visitors. The client attached particular importance to the preservation and integration of a part of a medieval vaulted cellar that was discovered during the previous demolition works. The historic stonework cellar was secured and illustrates the historic past in the new underground car park. The name of the modern residential district in the city centre also goes back to the historical figure of Bernhardus von Wydenbrueck, who had his house built in one of the neighbouring streets around 1650.

In close consultation with the client and applicator, as well as with the planner of the underground car park, StoDesign Interior designed an individual colour concept. The specifications for the building design and the selected materials were integrated here. The design is harmoniously matched to the preserved vault as well as to the green outer facade, at the same time elegant and life-affirming colours are chosen. The high-quality colour concept creates orientation and a bright, friendly room atmosphere. The modern design includes a natural green for the electric vehicle charging stations and an energetic orange colour shade for e-bike spaces.

For the floor coating, the investor and planner chose the StoFloor Traffic Elastic 590 EP multi-storey car park system, which has been tested and proven for many years. The system is ideal for use on watertight concrete floor slabs. It actually combines contradictory requirements and is tailored to multi-storey car park coatings with rising damp with simultaneous crack-bridging ability. This ensures that the underground car park durably retains its value and protects it from wear and tear over the long term. The investor deliberately opted for the colour scheme developed by StoDesign for the interior: the top sealing in lighter and darker earth tones for the parking areas. In the design concept, the supporting pillars take up the logo colours of the "Quartier" as well as the vault that has been left in its place.

The walls and pillars of the underground car park were designed with the surface protection StoCryl V 200. The rigid coating prevents water and contaminants dissolved in water from penetrating the concrete and reduces the absorption of carbon dioxide from the air. The product can be applied quickly and efficiently by brush, roller and airless sprayer. Furthermore, it allows a variety of colour shades according to the RAL and StoColor colour shade fans. StoCryl V 200 enables a wide range of design options and contributes to the lasting maintaining of the building's value.

The basis for the space-saving double stackers was StoConcrete Protect Elastic FB, a surface protection system in accordance with OS 5b (OS D I) surface protection. The polymer-modified cement-based coating system is also a tested building waterproofing for components in contact with the ground. It is highly impervious to pressing water, crack-bridging and protects the structure from chlorine-induced corrosion of the reinforced concrete.

Properties of **StoFloor Traffic Elastic 590 EP**

- Cementitious EP multi-storey car park system
- Water vapour permeable
- Tested for rising damp
- Dynamical crack-bridging (0,1 - 0,3 mm) and statical crack-bridging at various application volumes
- Widerstandsfähig gegen starken chemischen Angriff
- Very good bonding strength
- Very good wear resistance
- Limited combustion system build-up
- Radon-tight in accordance with IAF Measurement (Radeberg, DE)
- Large colour spectrum
- Large number of long-standing reference projects

Properties of **StoCryl V 200**

- Rigid coating for protection and coloured design of concrete
- Prevents ingress of water and harmful substances dissolved in water
- Regulates moisture balance
- Good penetration capacity
- Very good adhesive bond
- Good carbon dioxide impermeability and good water vapour diffusion capacity
- Large colour spectrum

Properties of **StoConcrete Protect Elastic FB**

- Coating build-up for the protection of concrete structures
- Cementitious, acrylate-modified, highly elastic
- Surface protection system OS 5b (OS D I)
- Surface protection system in accordance with EN 1504-2, method 1.3, 2.2 und 8.2
- Waterproofing in accordance with DIN 18533 and DIN 18535 as a mineral waterproofing slurry
- Excellent static and dynamic crack binding ability
- Good weathering and ageing resistance
- Resistant to salt spray
- High carbon dioxide impermeability
- Very good water vapour permeability

Who & What

Project:	Car Park Quartier von Wydenbrück, Paderborn, DE
Investor:	Pathera GmbH & Co. KG, Paderborn, DE
Planner:	Andreas Wigge, Paderborn, DE
Applicator:	Kloke Malermeister GmbH & Co. KG, Paderborn, DE
Colour Concept:	StoDesign Interior, Stühlingen, DE
Realisation:	12/2021
StoCretec Concept:	

StoFloor Traffic Elastic 590 EP

Surface Protection System OS 8.15

Prime Coating	StoPox GH 502
Scattering	StoQuarz 0,3 - 0,8 mm
Wearing course	StoPox 590 EP
Scattering	StoQuarz 0,3 - 0,8 mm
Sealing coat	StoPox DV 100
	StoPox WL 100

Double stackers

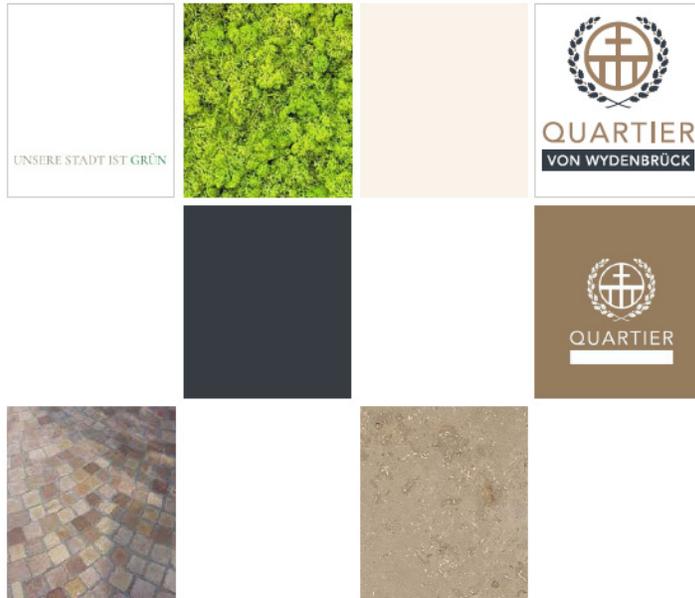
StoConcrete Protect Elastic FB

Surface protection system OS 5b (OS D I)

Scratch coat	StoCrete FB
Coating	StoCrete FB

Surface protection walls and pillars

Priming coat and	
Coating	StoCryl V 200



StoDesign Interior
Approach for colour concept

Photos courtesy of Pathera GmbH & Co. KG by Dieter Flach, Photomax





