

Project Report/April 2024

## New Surface Protection System for Parking Deck of Zinser Fashion House with UREA Hybrid Spray-on

The Zinser Fashion House in Herrenberg, Baden-Württemberg, Germany, had its customer parking garage, including an open parking deck, refurbished. The flooring areas of parking decks are subject to the risk of crack formation and transformation in crack width. Dynamic stress caused by vehicles in combination with weather influences and harmful substances can damage reinforced concrete in a short period of time. In order to ensure the value retention of the open parking deck in the long term, the team of experts decided on the new StoCretec traffic surface protection system **StoFloor Traffic Elastic SC 300**. The system is tested as surface protection system of class OS 10 in accordance with the DAfStb\* Guideline for the Protection and Repair of Concrete Components. The StoCretec system build-up OS 10.22 was used with the **StoPur SC 300** waterproofing layer and the **StoPur AC MultiCoat** wearing course.

**StoPur SC 300** is a UREA hybrid spray-on waterproofing layer with increased dynamic crack-bridging. The waterproofing layer is viscoelastic and solvent-free. It is processed mechanically and is therefore very time-saving for large areas.

In the OS 10.22 system build-up, **StoFloor Traffic Elastic SC 300** does not require full broadcasting nor a separate sealing coat. An integrated special grain size distribution ensures the required roughness and slip resistance of the **StoPur AC MultiCoat** wearing course. This is highly abrasion-resistant and wear-resistant. In the Parking Abrasion Test (PAT) it impressed with very low abrasion and achieved abrasion class VK1. When tested based on DIN EN 660-1:06-1999, the mass loss was 0.0 grams. **StoPur AC MultiCoat** is also resistant to oils and fuels. The product cures quickly and can also be processed at lower temperatures.

The open parking deck is now reliably and permanently protected from the ingress of water and harmful substances dissolved in water. This prevents damage through chlorine-induced steel corrosion. The service life of the open parking deck is significantly extended and the need for renovation is reduced in the long term.

\*DAfStb – German Committee for Reinforced Concrete

## Properties of **StoFloor Traffic Elastic SC 300**

- StoCretec PUR multi-storey car park system
- Increased dynamic bridging of cracks: class B 4.2 (-20° C) in accordance with DIN EN 1062-7
- High abrasion resistance
- With spray film suitable for application by machine
- For open decks, ramps and intermediate ceilings in multi-storey car parks
- For concrete and cementitious screed substrates
- Limited combustibility
- Thermal compatibility, resistance to thermal shock
- Impact strength class I
- Tested system build-up with voluntary external monitoring

## Who & What

Project:	Parking deck, Herrenberg, DE	
Investor:	Modehaus Zinser, Herrenberg, DE	
Planner:	Zimbelmann GmbH, Sindelfingen, DE	
GC:	Riehle Koeth GmbH + Co. KG, Reutlingen, DE	
Applicator:	2K Bauwerksanierung GmbH, Horb-Empfingen, DE	
Realisation:	9/2023	
StoCretec Competences:	<b>StoFloor Traffic Elastic SC 300</b>	
	Primer	StoPox GH 530
	Levelling coat	StoPox GH 530 with StoQuarz
	Waterproofing layer*	StoPur SC 300
	Wearing course	StoPur AC MultiCoat

\*main effective surface protection layer

Photos: StoCretec





