Project Report/March 2024

Car Park of Westend Shopping Centre Budapest with StoCretec Floor Coating

The “Westend” is Europe's second largest shopping centre and an attraction in Budapest. It offers over 400 commercial premises as well as 40 restaurants and cafés for annually more than 20 million visitors. Almost a quarter of a century after the opening, it was time to refurbish the approximately 1,500 parking spaces on about 17,000 square metres of highly frequented traffic area. The structural inspection revealed cracks and cavities as well as corrosion in the reinforced concrete structure.
The project team decided for StoCretec products and systems for the concrete repair and car park coating:
After opening cracks in the floor slab and in the intermediate deck, the specialist applicator worked with StoCretec PUR injection systems. Crack injection is a proven method for concrete repair. In the process, special reaction resins or mineral filling materials are injected into cracks or cavities. Polyurethane resins (PUR) are used to bond the flanks of the crack in an flexible manner. In this way, they reliably protect the steel reinforcement from corrosion. PUR resins also permanently seal damp and water-bearing cracks. The injection resins have a low viscosity that allows deep penetration into the crack.
The applicator then milled the surfaces. The resulting roughness was levelled out by applying a scratch coat.

The expert team decided to apply StoCretec multi-storey car park coating systems for all floors of the Westend car park. The applicator coated the almost 7,000 square metre floor slab of the car park with **StoFloor Traffic DV 100**. The epoxy resin system is ideally suited to withstand the stress that the daily use of traffic brings with it: permanent protection against possible damage caused by moisture, temperatures, temperature changes as well as oils or fuels of the parking vehicles. It’s high wear resistance helps to prevent damages developed by the high frequency of use of the popular attraction’s parking facilities. Crucial for the application of the system on the floor slab of the car park: The system is tested against moisture load on the back.

For the intermediate deck with a floor area of well over 9,000 square metres, the planning team chose **StoFloor Traffic Elastic EZ 500**. Surface protection coatings, suitable for vehicle traffic, with increased crack bridging are required wherever there is a risk of cracks forming or existing cracks show significant changes in crack width due to temperature and load changes. These features occur particularly on intermediate decks. The experts on site were also convinced by the other system properties, such as resistance to strong chemical attacks and the large number of long-standing references.

StoFloor Traffic Elastic 590 EP was used to protect the over 700 square metres of ramp areas. The EP coating system is statically and dynamically crack-bridging, highly wear-resistant and highly resistant to mechanical stress. This means it can withstand the special loads of ramps very well. Thanks to the broadcasting, the surface achieves the slip resistance class R13 and thus ensures safety even in damp conditions.

The team also used the StoCretec product range for the road and parking carpet markings. The EP water-based coating **StoPox WL 100** offers a large selection of colour shades and a glossy surface appearance. It offers excellent opportunities, for example, to visually highlight special parking areas for electric vehicles with charging station, disabled parking spaces or walkways for pedestrians. This ensures better orientation, greater safety and enables an attractive colour design.

Once again, Westend Budapest multi-storey car park is permanently protected from mechanical stress and emissions of harmful substances. StoCretec's system solutions for concrete repair and surface protection ensure their long-term value.

Properties of **StoFloor Traffic DV 100**

- StoCretec EP multi-storey car park system
- For floor slabs and ramps in multi-storey car parks made of concrete and cementitious screed
- Slip-resistant
- Tested for rising damp
- Resistant to severe chemical attack
- Very good wear resistance
- Limited combustibility system build-up
- Tested system build-up with voluntary external monitoring
- In accordance with EN 1504-2 and EN 13813
- Thermal compatibility and resistant to temperature shock
- Various test certificates regarding slip resistance are available

- Colour spectrum: RAL colour fan K 5, StoColor System, NCS, other

Properties of **StoFloor Traffic Elastic EZ 500**

- StoCretec PUR multi-storey car park system
- Increased crack bridging ability
- For intermediate ceilings and open decks of car parks made of concrete or cementitious screed
- Resistant to severe chemical attack
- Tested for rising damp
- Limited combustibility system build-up
- Tested system build-up with voluntary external monitoring
- In accordance with EN 1504-2 and EN 13813
- Large number of long-term references
- Various test certificates regarding slip resistance are available
- Colour spectrum: RAL colour fan K 5, StoColor System, NCS, other

Properties of **StoFloor Traffic Elastic 590 EP**

- StoCretec EP multi-storey car park system
- For water-tight concrete floor slabs and ramps of car parks
- Water vapour permeable
- Statically and dynamically crack-bridging
- Tested for rising damp
- Very good wear resistance
- Resistant to severe chemical attack
- Highly resistant against mechanical stress
- Limited combustibility system build-up
- Radon-tight in accordance with IAF Measurement (Radeberg, DE)
- Tested system build-up with voluntary external monitoring
- In accordance with EN 1504-2 and EN 13813
- Colour spectrum: RAL colour fan K 5, StoColor System, NCS, other

Who & What

Project:	Underground parking shopping centre, Budapest, HU
Investor:	WESTEND INGATLANHASZNOSÍTÓ és ÜZEMELTETÉSI Kft., Budapest, HU
Planner:	Finta és Társai Építész Stúdió Kft., Budapest, HU
Applicator:	Hajza Bau Kft., Budapest, HU

StoCretec [Project]

Realisation: 7/2022

StoCretec Competences:

StoFloor Traffic DV 100

Primer and Levelling coat	StoPox GH 205
Broadcasting	StoQuarz 0,1 - 0,5 mm
Sealing coat	StoPox DV 100

StoFloor Traffic Elastic EZ 500

Primer	StoPox GH 205
Broadcasting	StoQuarz 0,3 - 0,8 mm
Coasting	StoPur EZ 500
Broadcasting	StoQuarz 0,3 - 0,8 mm
Sealing coat	StoPox DV 100

StoFloor Traffic Elastic 590 EP

Primer	StoPox GH 205 with StoQuarz 0,3 - 0,8 mm
Wearing coat	StoPox 590 EP
Broadcasting	StoQuarz 0,3 - 0,8 mm
Sealing coat	StoPox DV 100

Marking EP water-based coating	StoPox WL 100

Photos: Zsolt Hlinka, Building and interior photographer, upon investor request no logos on building


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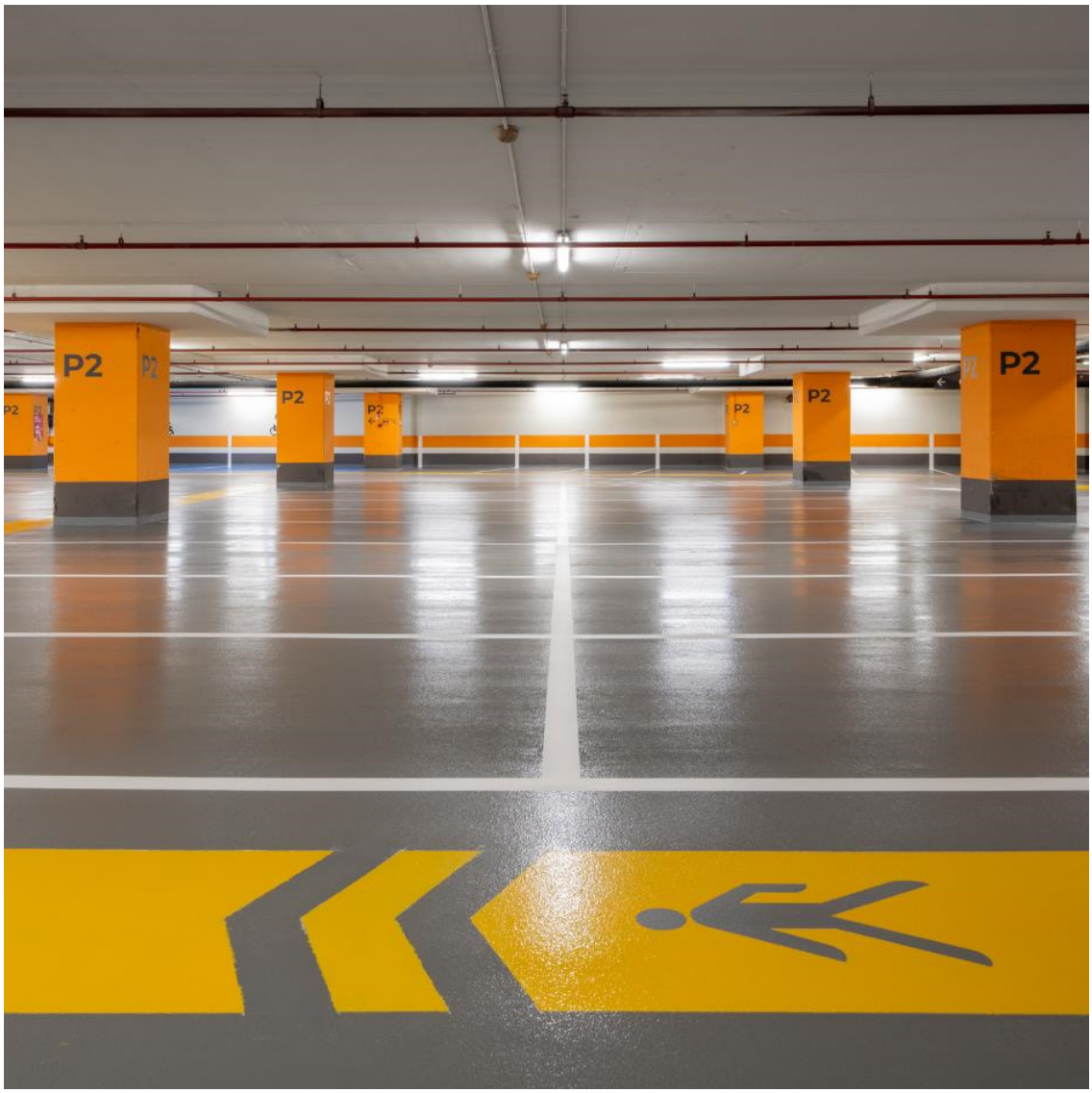
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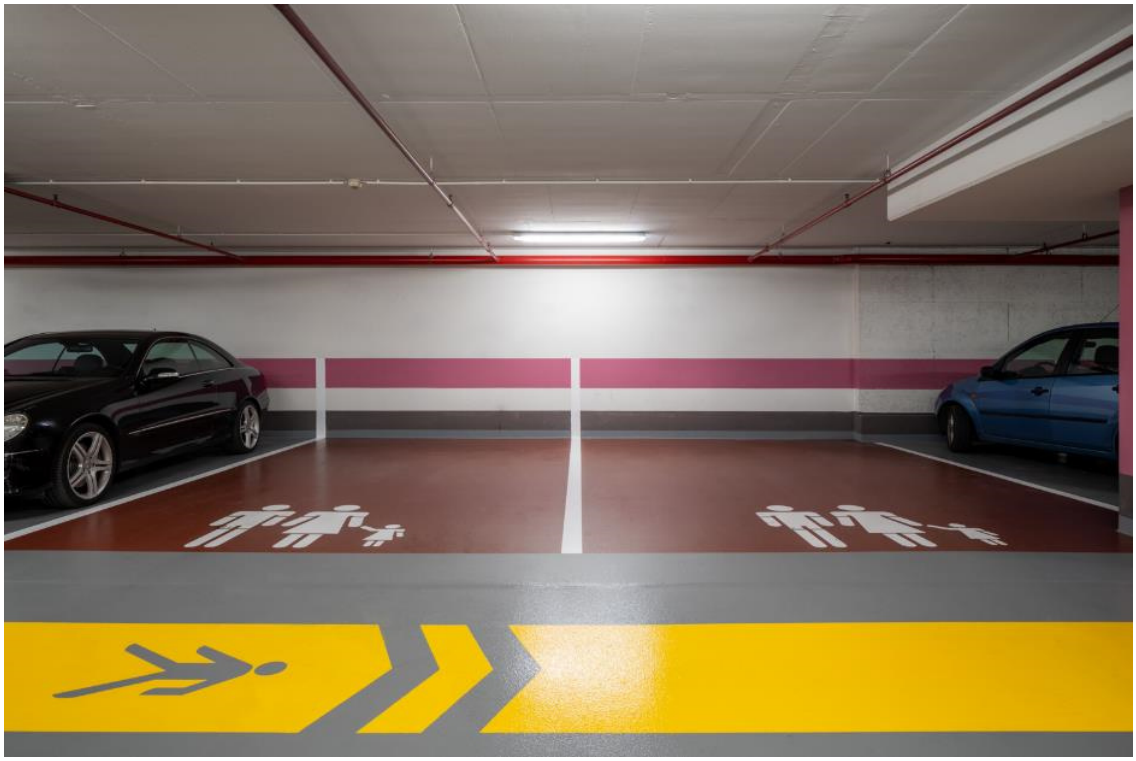


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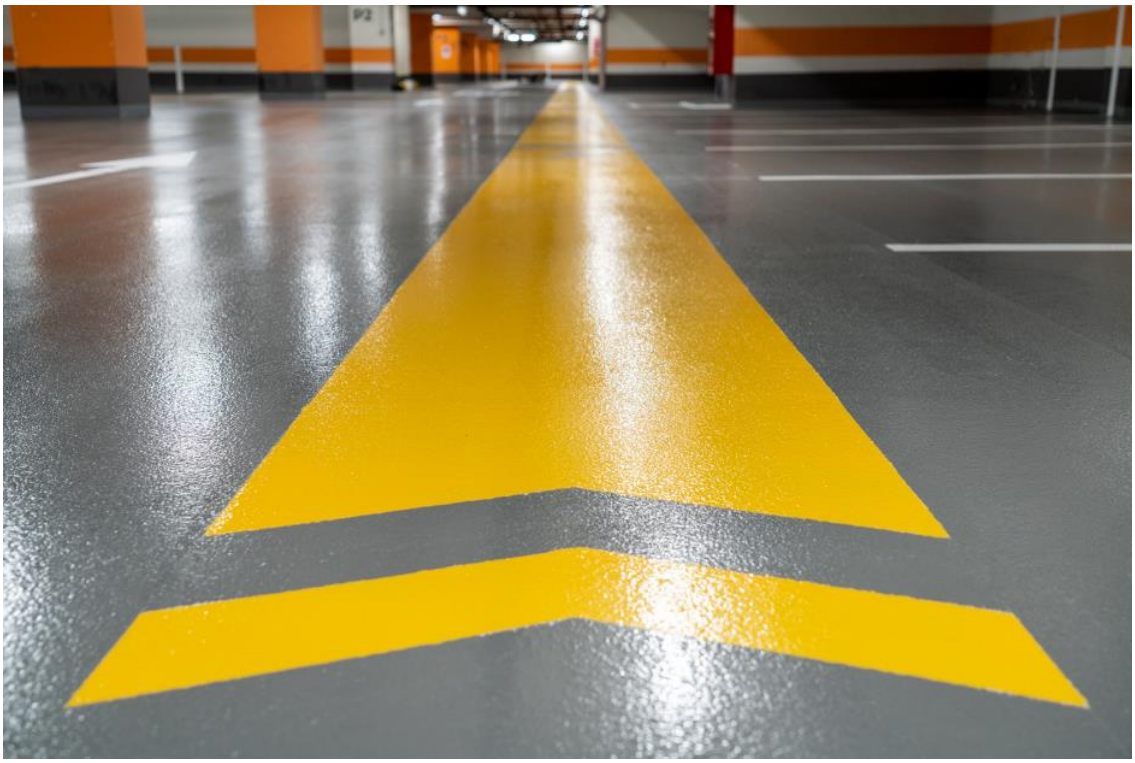

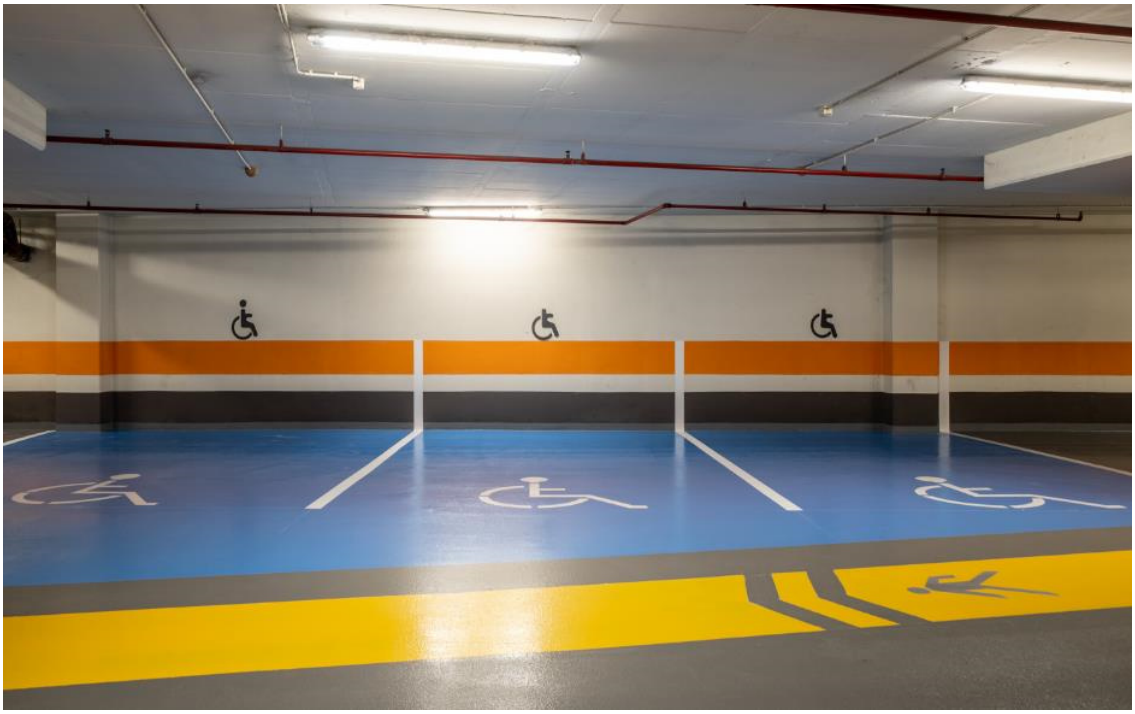

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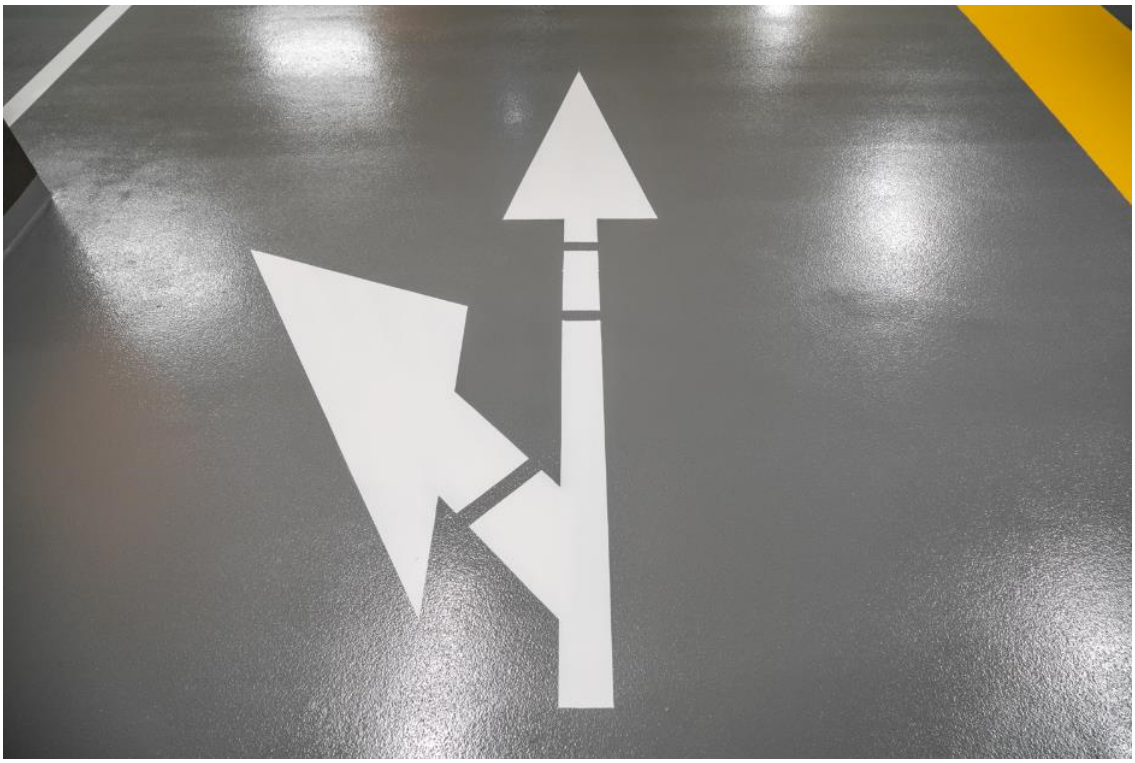


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