

Project Report/September 2024

Fresh Cycle Path Coating for Margaret Bridge in Budapest

The Margaret Bridge in Budapest is the second oldest of nine Danube bridges in the Hungarian capital. The bridge with its still preserved stone pylons was built between 1872 and 1876. It is over 600 metres long and connects Margaret Boulevard in Buda with Szent István Boulevard in Pest. A special feature is that it consists of two parts that meet at the southern tip of Margaret Island and form an angle of 150 degrees. The 25-metre-wide bridge accommodates two lanes in each direction, as well as two tram tracks, sidewalks on both sides and a cycle path.

After the Margaret Bridge was last repaired in 2011, the damaged coating of the cycle path had to be removed again from the reinforced concrete by sandblasting and the damaged areas repaired. This was followed by applying corrosion protection with **StoPox ZNP**. The epoxy resin-based product adheres very well to iron and steel. It meets the corrosivity category C4 according to DIN EN 12944-2 and it can be used indoors and outdoors. StoPox ZNP is ready for the next coat after just 12 hours at average temperatures of +23 °C and is fully cured after about three days.

For the floor coating of the over 1,300 square metre cycle path on the north side of the bridge, the team of experts chose **StoFloor Traffic Elastic TEP MultiTop** as the surface protection system OS 11 a with the StoPox TEP MultiTop coating and the sealing coat StoPur DV 508.

With its special formula - a combination of epoxy and polyurethane resin - StoPox TEP MultiTop combines high wear resistance with increased dynamic crack-bridging. For the safety of cyclists who cross the Danube as commuters or holidaymakers, the cycle path was given the slip-resistance class R12. This is particularly important in wet conditions.

Compared to PU systems, **StoFloor Traffic Elastic TEP MultiTop** offers a crucial advantage. If the top sealing coat is rubbed off after many years of use, the integration of the grit remains intact. In contrast to many PU systems, no serious degradation of the EP-PU binder will occur due to mechanical stress, moisture and UV light. Renewing the top coat can extend the working

life of the coating system with little effort. Numerous references confirm the durability of the tested system. After 20 years of daily use, the coated surfaces are still fully functional.

The colour design of the Margaret Bridge follows its historical designs. The ruby red sealing coat of the cycle path with StoPur DV 508 is particularly suitable for areas exposed to the elements and direct sunlight. The material with a glossy appearance is viscoelastic, UV- and weather-resistant, and abrasion-resistant. The PU coat can be walked on after just 8 hours and is fully cured after 7 days.

Properties of **StoFloor Traffic Elastic TEP MultiTop**

- StoCretec EP surface protection system, hybrid technology
- Crack-bridging
- High wear resistance
- High thermal compatibility and temperature shock resistance
- Limited combustibility system build-up
- Various test certificated regarding slip resistance
- Resistant to severe chemical attack
- In accordance with EN 1504-2 and EN 13813
- Tested system build-up with voluntary external monitoring
- Large number of long-term references

With the completion of the new cycle path, the bridge can be returned to its intended purpose and – on busy days – can permanently withstand up to 18,000 crossings from Buda to Pest and back by cyclists and so-called micromobility.

Who & What

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| Project: | Floor coating bridge cycle path, Budapest, HU |
| Investor: | Budapest Közút Zrt., Budapest, HU |
| Architect: | FŐMTERV'TT Zrt., Budapest, HU |
| Applicator: | KORRÓZIÓ-2001 Kft., Budapest, HU |

Realisation: 8/2024

StoCretec Competence: **StoFloor Traffic Elastic TEP MultiTop**
Corrosion protection StoPox ZNP
Primer StoPox GH 205
Coating StoPox TEP MultiTop
with StoQuarz 0,6 - 1,2 mm
Sealing coat StoPox DV 508 in RAL 3003

Photos: Boom-Video – Ballér Attila e.v., Budapest, HU









