

Quai Bridge Zurich (Switzerland)



Project description

The Bellevue is classified as one of Zurich's central traffic junctions. In addition to the frequent crossings of seven streetcars and two bus lines, around 60'000 cars cross the Quai Bridge everyday. Furthermore, approximately 76'000 people hop on and off at the stopping points of the public transport facilities on a daily basis.

In order to meet the requirements of the increase in traffic and to ensure the bridge's servicing, its complete surface had to be renovated. Sealings, pavements and rails were renewed, as well as handicap accessible fittings and two new stopping halls were constructed with the target of creating better harmonising with the surrounding historic buildings from 1939. Moreover, the Quai Bridge itself was broadened for the sake of granting more space for both pedestrians and cyclists.

Together with many other Swiss cities, Zurich registers an immense boom in traffic increase



mageba scope

mageba installed single gap joints featuring noise reducing sinus plates. Noise caused by overrolling traffic has hence been reduced by 80 %. Moreover, the joints are anchored with a special polymer concrete.

The main challenges were related to the geometric complexity with the combination of the tramway area, pedestrian area as well as dividing the project into seven short stages with various site linkings. As the joint lies within the depth of the asphalt only, no further intervention in the structure was required allowing for a quicker and more cost-effective installation. Also for future refurbishments, an intervention in the concrete structure is no longer required.

Another benefit of the 100 % watertight ROBO®FLEX polymer concrete is its extremely low abrasion properties.

Inserting the joint with cover plates in the walkway area and sinus plates in the carriage way



Highlights & Facts

mageba Products:

Type:	TENSA®CRETE single gap joints of type RE-LS 100
Features:	With rail trough and noise-reducing sinus plates
Installation:	2015

Structure:

City:	Zurich
Country:	Switzerland
Type:	Steel composite bridge
Built:	1984 (new deck)
Length:	121 m
Owner:	City of Zurich
Engineer:	IG Toscano-Heierli
Contractor:	WALO Bertschinger AG

Impressions from the construction site in June 2015 in the Bellevue sector

