SIKA AT WORK
STEEL DECK WATERPROOFING ON HIGHWAY A59 IN DUISBURG, GERMANY

BRIDGE DECK WATERPROOFING: SikaCor® HM System
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PROJECT DESCRIPTION
Berliner Bridge is located at Highway A59, Duisburg, Germany, consisting of seven single bridges, three of them are steel structures. The original construction year of the bridge was between 1960 and 1963. The surface of the bridge is approx. 17,500m².

PROJECT REQUIREMENTS
After more than 50 years in use, a general refurbishment of the 1.8 km long elevated highway was necessary. Due to increasing traffic loads over the years to a current level of approximately 80,000 vehicles a day, an extension from 2 lanes to 3 lanes in each direction took place. The existing road surface had debonded from the waterproofing layer, causing danger to vehicles braking under load, and the structure to be attacked by corrosion, particularly from deicing salts during the winter period.

SIKA SOLUTIONS
The new and innovative waterproofing system based on the SikaCor® HM System, provides perfect corrosion protection and excellent waterproofing properties to the steel deck. Additionally, very high shear strength to the asphalt overlay and tensile adhesion strength to the substrate gives added safety for vehicles & improves durability. The system is approved and certified by the German Highway Authorities, as well as International approval from the Highway Authority in the Province of Shanghai / China.

3,000 m² concrete deck:
Primer: Sika Ergodur-500 Pro
Waterproofing: Sika Ergobit (torched bitumen membrane)

17,500 m² steel deck:
Primer: SikaCor® HM Primer
Waterproofing: SikaCor® HM Mastic
Tackcoat: SikaLastic®-827 HT

PROJECT PARTICIPANTS
Project owner: Landesbetrieb Strassenbau NRW
Contractor: various contractors for steel protection, concrete refurbishment and asphalt overlay
Sika organization: Sika Germany GmbH
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