WATERPROOFING
BRIDGE DECK PROTECTION
SIKA'S ADVANCED SOLUTION FOR EXCELLENT DURABILITY, FAST APPLICATION AND LIGHT LOAD
PROVEN BRIDGE DECK PROTECTION
With Sika’s new high performance technology

PROTECTION OVERVIEW
To increase the durability of concrete bridges, all concrete movement and construction joints plus especially the bridge decks have to be waterproofed to prevent serious damage to the concrete or to the embedded steel reinforcement. Due to dynamic loading, the bridge decks must be protected with elastic crack-bridging systems which are able to accommodate every movement and keep the performance of bridge deck protection. The whole system shall be able to withstand the traffic load under the climatic conditions which the bridge structure is exposed to, in addition provide a good bond to the asphalt overlay.

REQUIREMENTS
- Elastic crack-bridging properties under a wide range of temperatures.
- Resistance to chlorides and aggressive chemicals such as fuel, oils and hydraulic fluids.
- Easy and safe to install under different weather conditions and suitable for different substrate conditions.
- Fast application to reduce down time.

SIKA PROTECTION SOLUTIONS FOR CONCRETE BRIDGE DECK

Sikalastic®-841 ST / 821 LV WITH Sikalastic®-827 LT/HT
1. Wearing course: hot mixed asphalt / asphalt concrete (+140–180° C)
2. Base course: mastic asphalt (+240° C), or hot mixed asphalt / asphalt concrete (+140–180° C)
3. Tack-coat: Epoxy-/PU-based + Sikalastic®-827 LT/HT
4. Waterproofing layer: Sikalastic®-841 ST / 821 LV
5. Primer: Epoxy-based + broadcasted (QS 0.4–0.7 mm)
6. Concrete deck
SIKA SOLUTIONS
New technology with Sikalastic® protection membrane (e.g. Sikalastic®-821 LV / Sikalastic®-841 ST)
- Liquid applied membrane based on Polyurethane or Polyurea
- NEW innovative pellets-system for high bond and shear strength
- Fast application / fast curing
- Short down time

SIKA’S ADVANCED SYSTEM
- Light-weight system
- Customized solution with Sika expert competence
- For concrete decks in new construction and for refurbishment
- System build-up with different protection and bonding solutions
- ZTV-BEL-B/ ETAG 033 and BBA HAPAS certified
- Improved adhesion / improved life cycle costs
- Global technical support

SIKA PROTECTION SOLUTIONS FOR STEEL BRIDGE DECK
Sika Elastomastic® TF
1. Top coat (optional): Sikafloor®-357
2. SikaCor® Elastomastic TF filled with Korrodur Durop 2-3 mm
   Broadcast with Korrodur Durop 2-3 mm
3. SikaCor® HM Primer
4. Steel deck > 12 mm

- System with or without asphalt topping
- Directly trafficable
- High mechanical resistance
- Good corrosion protection

SikaCor® HM Mastic + Sikalastic®-827 LT/HT
1. Wearing course: Hot mixed asphalt / asphalt concrete (+140–180°C)
2. Base course: mastic asphalt (+240°C), or hot mixed asphalt / asphalt concrete (+140–180°C)
3. Sikalastic®-827 LT/HT pellets broadcast
4. Primer: 2-comp-epoxy SikaCor® HM Primer
5. Steel deck > 12 mm

- Thin layer corrosion protection
- Good bonding and high shear strength to asphalt under different application temperatures
Our most current general sales conditions shall apply.
Please refer to the relevant data sheet prior to any use or processing of Sika products.

SIKA’S FULL RANGE OF CONSTRUCTION SOLUTIONS

Concrete Production
- Sika’ ViscoCrete™
- Sika’ Retarder™
- Sika’ SikaAer™

Waterproofing
- Sikaplan™, Sikalastic™
- Sika’ & Tricosal™ Waterstops
- Sika’ Injection Systems

Flooring
- Sikafloor™
- SikaBond™

Coatings, Silanes & Siloxanes
- Sikagard™
- Ferrogard™

Concrete Repair and Protection
- Sika’ MonoTop™
- Sikagard™
- Sikadur™

Structural Strengthening
- Sika’ CarboDur™
- SikaWrap™
- Sikadur™

Joint Sealing
- Sikaflex™
- Sikasil™

Grouting
- Sikadur™
- SikaGrout™

Roofing
- Sarnafil™
- Sikaplan™
- SikaRoof™ MTC™

Waterproofing - Bridge Deck Protection - April 2014

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