WATERPROOFING
BRIDGE DECK PROTECTION
SIKA’S ADVANCED SOLUTIONS FOR FAST APPLICATION, EXCELLENT DURABILITY AND INCREASED SAFETY
PROVEN BRIDGE DECK PROTECTION

PROTECTION OVERVIEW

Bridges are an essential part of modern infrastructure and are often subject to the harshest weather that climates have to offer. In order to maintain the durability over its design life, special attention should be given to the protection of exposed elements and critical areas such as the bridge deck itself, to prevent serious damage to the concrete and structural reinforcement. Due to constant movement, the deck waterproofing system must be able to accommodate dynamic traffic loads and bridge cracks whilst still maintaining a strong bond with both the substrate and asphalt road surface. Bonding failure can lead to loose or rucked road surfaces allowing water, chlorides and chemicals to attack the structure, reducing the design life.

SIKA SOLUTIONS

New technology with Sikalastic® waterproofing membrane (e.g. Sikalastic®-851 / Sikalastic®-841 ST)
- Liquid applied membrane based on Polyurethane or Polyurea
- New innovative Sikalastic®-827 pellets-system for high bond and shear strength

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.
- Maintaining strong bond when vehicles break hard

SIKA'S ADVANCED SYSTEM

- Light-weight system
- Customized solution with Sika expert competence
- For new construction or refurbishment
- System build-up with different protection and bonding solutions
- ETAG 033 and BBA HAPAS certified
- Improved adhesion reduces maintenance costs & increases safety for vehicles
- Global technical support

SIKA PROTECTION SOLUTIONS FOR CONCRETE BRIDGE DECKS

- Sikalastic®-841 ST / 851 WITH Sikalastic®-827 / 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 PROTECTION SOLUTIONS FOR STEEL BRIDGE DECKS

- Sikalastic®-8800 ONE SHOT SYSTEM
- 1. Top coat: Sikafloor® 359
- 2. Wearing coat: Sikalastic®-8800 with aggregate injection
- 3. Waterproofing membrane: Sikalastic®-8800
- 4. Primer: SikaCor® Elastomastic Airless
- 5. Steel deck

- Sikalastic®-827 / 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 / HT pellets broadcast
- 4. Prime: 2-comp-epoxy SikaCor® HM Primer
- 5. Steel deck > 12 mm
WHO WE ARE
Sika AG, Switzerland, is a globally active specialty chemicals company. Sika supplies the building and construction industry as well as manufacturing industries (automotive, bus, truck, rail, solar and wind power plants, facades). Sika is a leader in processing materials used in sealing, bonding, damping, reinforcing and protecting loadbearing structures. Sika’s product lines feature high quality concrete admixtures, specialty mortars, sealants and adhesives, damping and reinforcing materials, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.

Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.

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