



# WATERPROOFING BRIDGE DECK PROTECTION

SIKA'S ADVANCED SOLUTIONS FOR FAST APPLICATION, EXCELLENT DURABILITY  
AND INCREASED SAFETY

BUILDING TRUST



# PROVEN BRIDGE DECK PROTECTION

With Sika's new high performance technology



3 APPLICATION OF TACK COAT AND EXPANDABLE PELLETS

2 APPLICATION OF

## 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.

## REQUIREMENTS

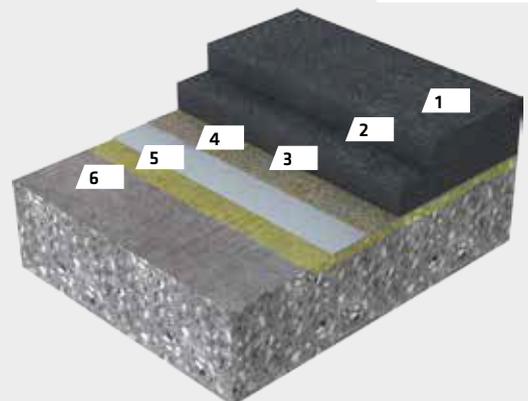
- Elastic crack-bridging properties under a wide range of temperatures.
- Resistance to chlorides and aggressive chemicals such as fuel, oils and hydraulic fluids.
- Easy and safe to install under different weather conditions and suitable for different substrate conditions.
- Fast application to reduce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

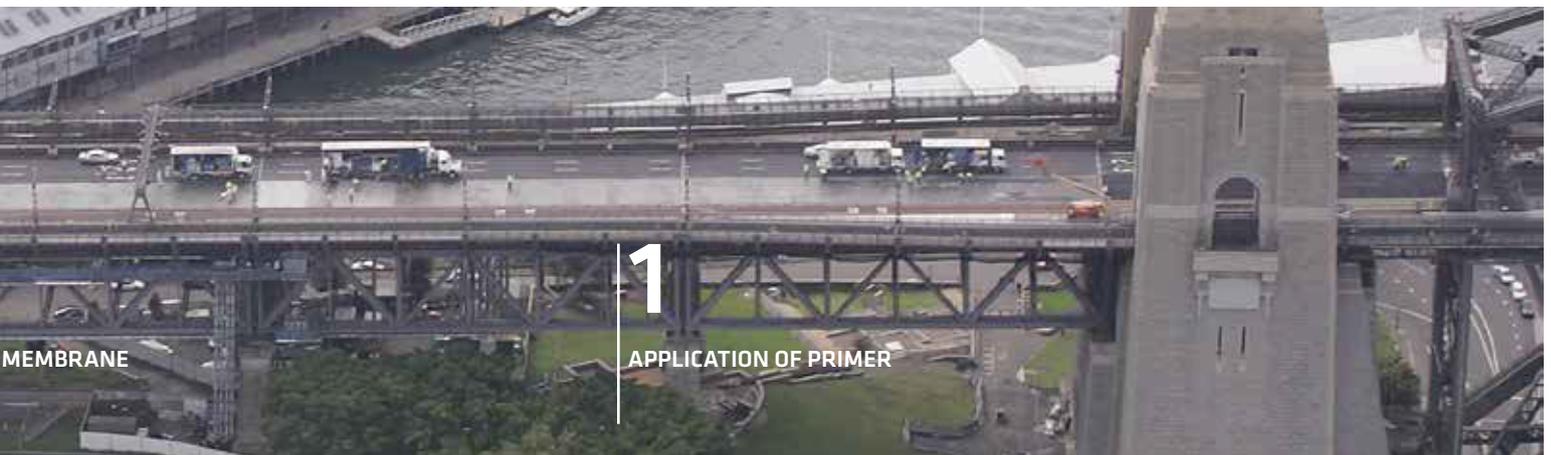
## SIKA PROTECTION SOLUTIONS FOR CONCRETE BRIDGE DECKS



### 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 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

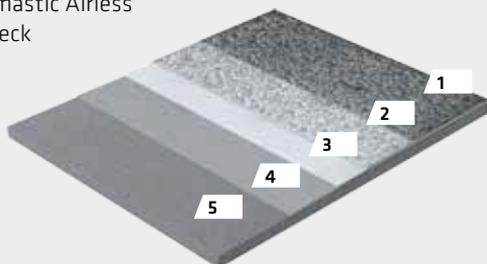
### SIKA'S ADVANCED SYSTEM

- 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 STEEL BRIDGE DECKS

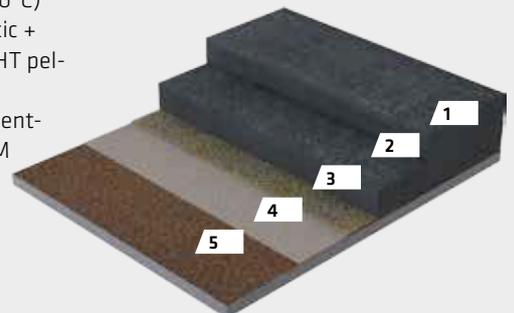
### Sikalastic®-8800 ONE SHOT SYSTEM

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
- System without asphalt topping
  - Directly trafficable
  - Very high mechanical and abrasion resistance
  - Excellent corrosion protection

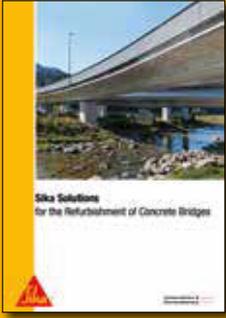


### SikaCor® HM Mastic + Sikalastic®-827 / HT

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. SikaCor® HM Mastic + Sikalastic®-827 / HT pellets broadcast
  4. **Primer:** 2-component-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



# ALSO AVAILABLE FROM SIKA



## FOR MORE INFORMATION:



### WE ARE SIKA

Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing and protecting in the building sector and the motor vehicle industry. Sika's product lines feature concrete admixtures, mortars, sealants and adhesives, 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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