



MORE **PERFORMANCE**  
MORE **SUSTAINABLE**

# ENGINEERED REFURBISHMENT CONCRETE PROTECTIVE COATING WITH REDUCED CARBON FOOTPRINT

Sikagard®-5500

BUILDING TRUST





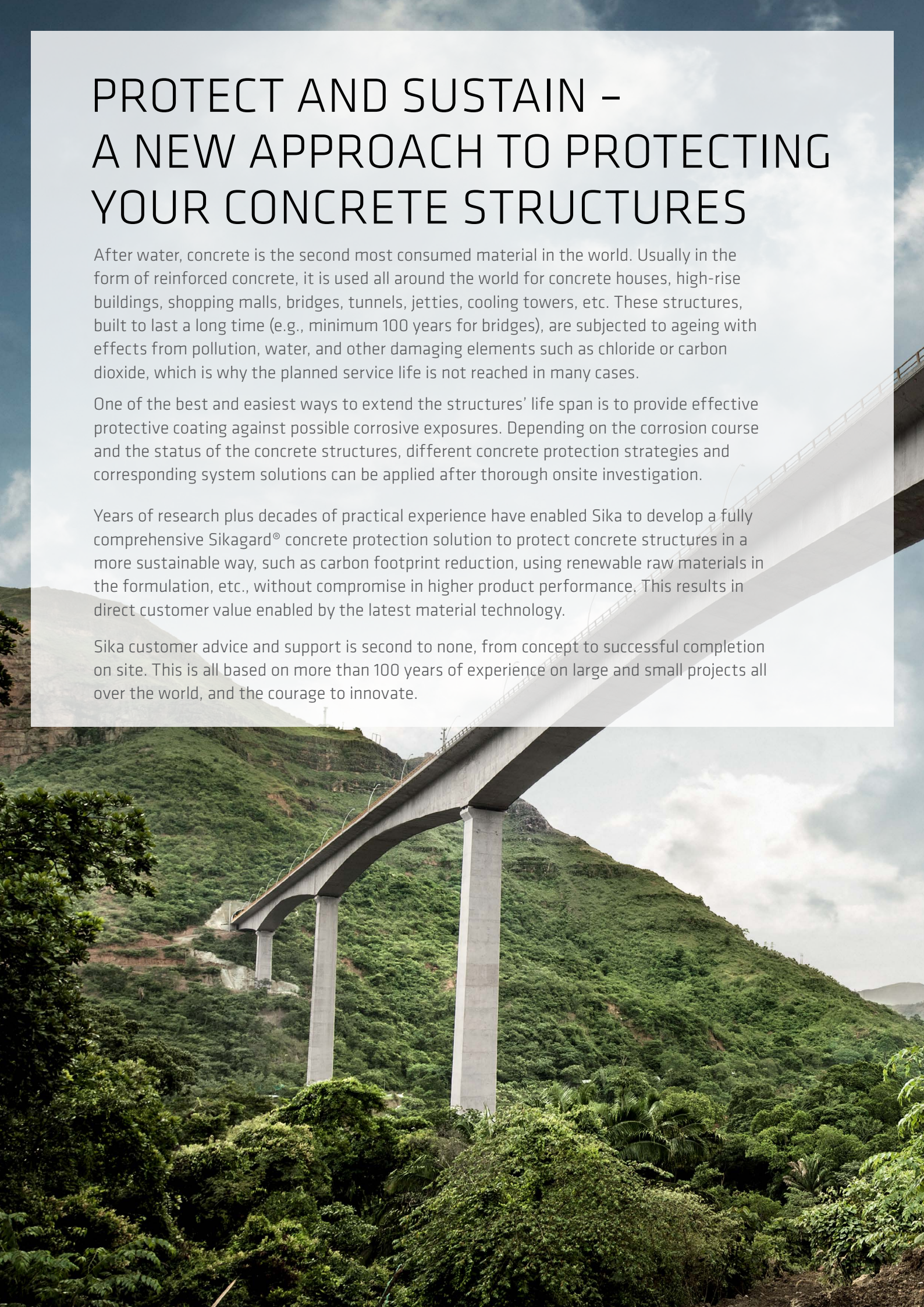
# PROTECT AND SUSTAIN – A NEW APPROACH TO PROTECTING YOUR CONCRETE STRUCTURES

After water, concrete is the second most consumed material in the world. Usually in the form of reinforced concrete, it is used all around the world for concrete houses, high-rise buildings, shopping malls, bridges, tunnels, jetties, cooling towers, etc. These structures, built to last a long time (e.g., minimum 100 years for bridges), are subjected to ageing with effects from pollution, water, and other damaging elements such as chloride or carbon dioxide, which is why the planned service life is not reached in many cases.

One of the best and easiest ways to extend the structures' life span is to provide effective protective coating against possible corrosive exposures. Depending on the corrosion course and the status of the concrete structures, different concrete protection strategies and corresponding system solutions can be applied after thorough onsite investigation.

Years of research plus decades of practical experience have enabled Sika to develop a fully comprehensive Sikagard® concrete protection solution to protect concrete structures in a more sustainable way, such as carbon footprint reduction, using renewable raw materials in the formulation, etc., without compromise in higher product performance. This results in direct customer value enabled by the latest material technology.

Sika customer advice and support is second to none, from concept to successful completion on site. This is all based on more than 100 years of experience on large and small projects all over the world, and the courage to innovate.









# Sikagard<sup>®</sup>-5500

Highly elastic and sustainable concrete protective coating

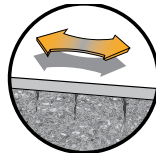
**BY PROTECTING AGAINST HARSH EXPOSURE AND CONTAMINANTS**, the formulation increases the technical and application performance compared with older products and is an aesthetic improvement. Moreover, this innovative product was designed with a dispersion derived from renewable feedstock (biomass) with sustainable features.

## MORE PERFORMANCE

- Higher crack bridging with less material
- Time saving – fewer application steps
- Less maintenance – reduced green growth

## TECHNICAL PERFORMANCE

- **Best in class for crack bridging – lower consumption**
- High flexibility – works against future cracks up to more than 2.5 mm, even at -20°C
- Better concrete protection from degradation and corrosion. Meets EN 1504-2 requirements, used for methods 1.3, 2.3 and 8.3.
- Adjustable consistency to meet crack bridging requirements – from Class A3 (-20°C) to the very demanding B4.1 (-20°C).



## COST BENEFITS

- **Save 20% time due to fewer application steps**
- Easy application – particularly suited for spray application.
- 1 component – easy preparation
- No special intermediate coat required. Reduces the number of products as well as application steps through high yield.

## ESTHETICS

- **Less maintenance – reduced algal and fungal growth**
- Matt gloss appearance
- Wide color range
- High opacity





## MORE SUSTAINABLE

- Reduced carbon footprint
- Dispersion based on renewable feedstock
- Meets LEED v4 requirements

## REDUCED CARBON FOOTPRINT

A life cycle assessment according to ISO 14040 and EN 15804 shows that the use of **Sikagard®-5500 reduces the carbon footprint by 30%**

## DISPERSION BASED ON RENEWABLE FEEDSTOCK

**Dispersion derived from 100% renewable resources**  
**Buckets made of 80% recycled material**

## GREEN BUILDING

**By using Sikagard®-5500 owners can gain two LEED credit points**, the most widely used green building rating system in the world. One credit goes for material ingredients, the other for the environmental product declaration for dispersion-based products.

**AT SIKA WE BELIEVE** that performance and sustainability need to walk hand in hand. Why compromise?

Sikagard®-5500 is the result of our unique mindset and development efforts where we can proudly prove that, yes, more performant and more sustainable is possible. To learn more about the product, please visit our webpage.





# Sikagard®-5500

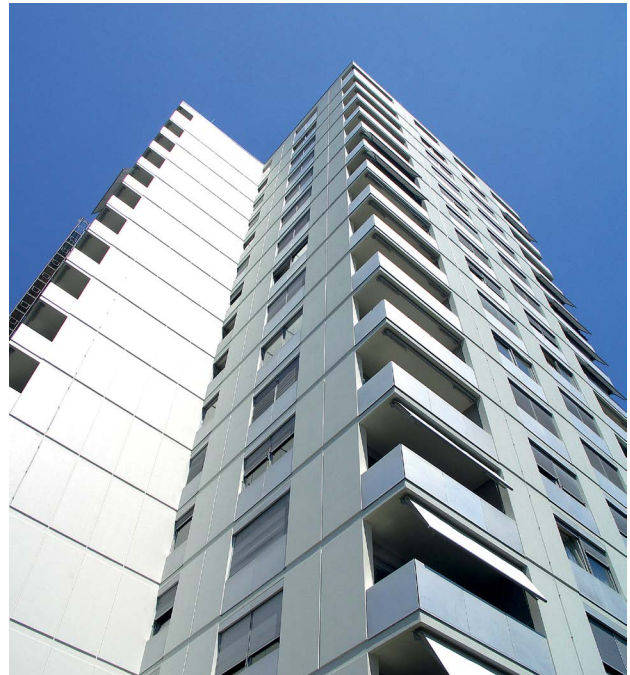
Protect concrete structures and extend service life

## USES

### INFRASTRUCTURE



### BUILDINGS WITH CONCRETE FACADES



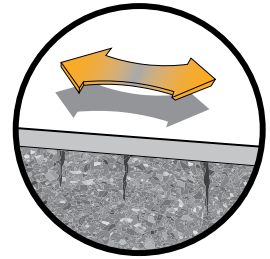
### INDUSTRIAL STRUCTURES



### SILOS

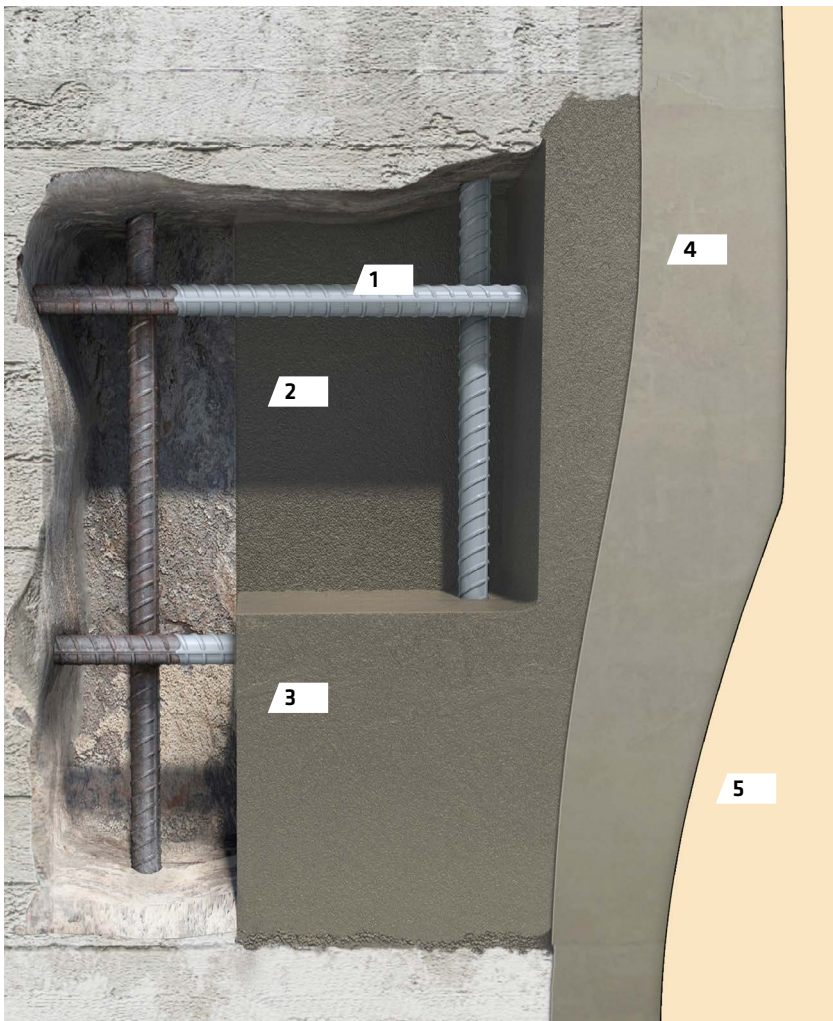


## APPLICATION



Concrete structures vulnerably to cracks and subjected to dynamic loads.

## USE AS PART OF SIKA MonoTop® REPAIR SYSTEM



1

### **Reinforcement Corrosion Protection Sika MonoTop®-1010**

- To prevent further corrosion of steel reinforcement

2

### **Bonding Primer Sika MonoTop®-1010**

- To promote adhesion of the repair mortar on demanding substrates

3

### **Repair Mortar Sika MonoTop®-4012**

- To repair concrete defects
- To restore structural integrity
- To improve durability
- To improve appearance
- To extend the structure's design life

4

### **Pore Sealer / Levelling Mortar Sika MonoTop®-3020**

- To restore durability
- To restore aesthetic appearance
- To restore geometric appearance
- To provide a surface for over-coating

5

### **Concrete Protective Coating Sikagard®-5500**

- To prevent further concrete degradation
- To bridge post occurring cracks
- To restore aesthetic appearance

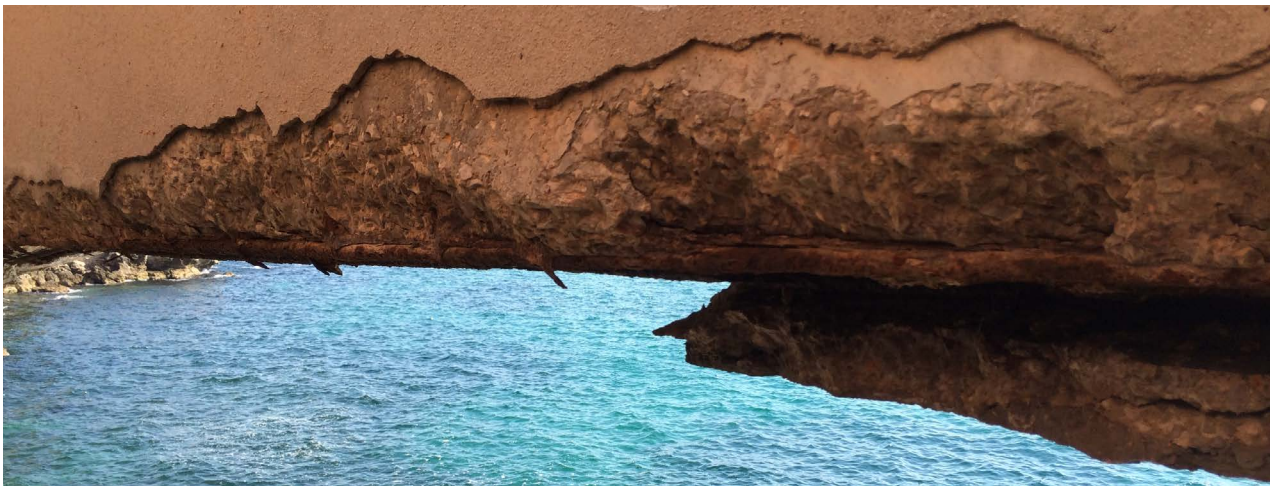


# TOTAL CONCRETE REFURBISHMENT MANAGEMENT

Sika as a full system supplier for concrete protection

**TO CARRY OUT A REFURBISHMENT PROJECT**, asset owners can apply different techniques, depending on the severity of the situation, expected durability, location of the project, budget, time and other constraints.

Sika is the right partner for any challenge you encounter because of its decades of practical know-how. Contact your local Sika contact person to get an overview on the Total Corrosion Management and choose the most suitable solution for your project.



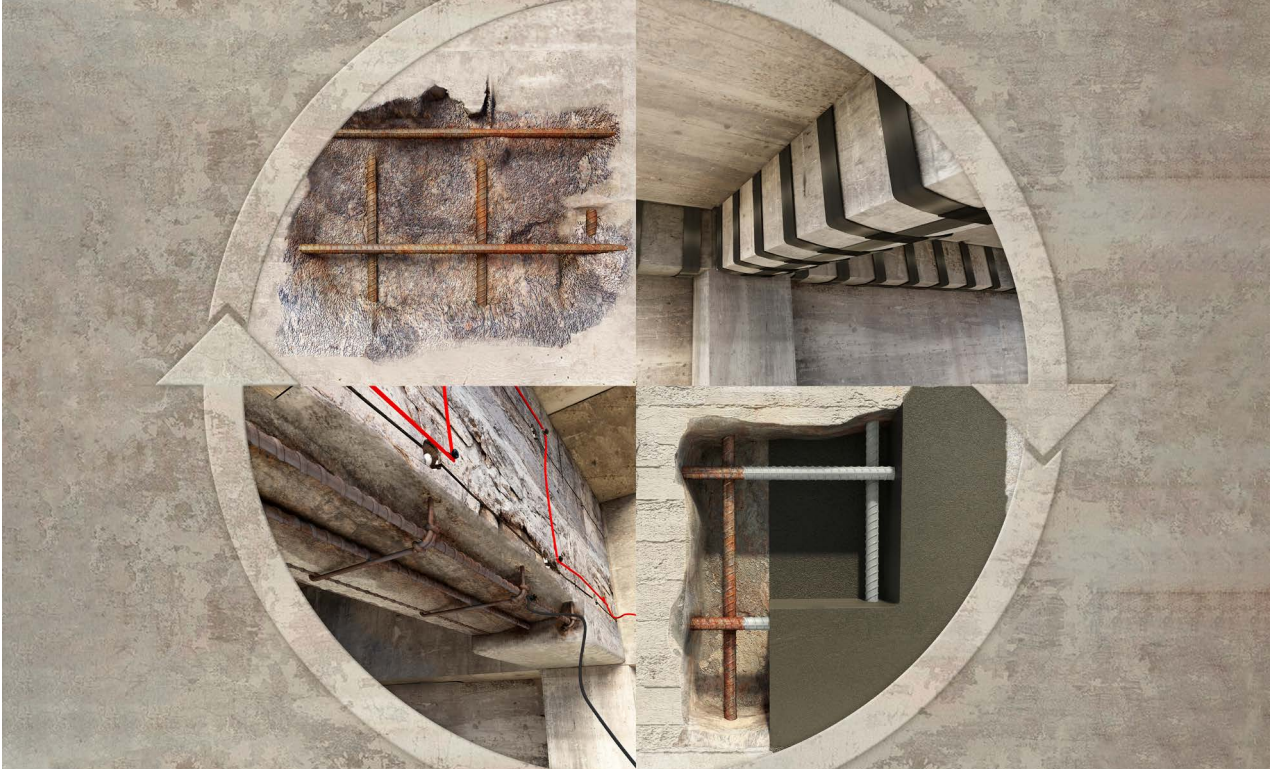
## CORROSION MANAGEMENT

- Cathodic Protection
- Active and Passive Corrosion Inhibitors

## REPAIR MANAGEMENT

- Steel Bar Protection
- Structural Repair Mortars
- Resurfacing Mortars





**STRENGTHENING MANAGEMENT**

- Flexural Strengthening
- Confinement
- Shear Strengthening
- Deflection Reduction
- Active Strengthening

**PROTECTION MANAGEMENT**

- Hydrophobic Impregnation
- Protective Coating











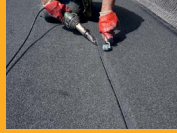
# SIKA FULL RANGE SOLUTIONS:



LIQUID APPLIED ROOFING



SINGLE PLY ROOFING



BITUMINOUS ROOFING



CONCRETE



CONCRETE REPAIR



STRUCTURAL STRENGTHENING



BUILDING FINISHING



WATERPROOFING



JOINT SEALING



FAÇADES



FLOORING



INDUSTRY



DISTRIBUTION



MODULAR/OFFSITE

## FOR MORE INFORMATION ON SIKA VISIT OUR WEBSITE:



### WHO WE ARE

Sika Limited and Sika Ireland Limited are part of the global Sika Group, specialising in the manufacture and supply of chemical based products. Sika has 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 has subsidiaries in 103 countries around the world and manufactures in over 400 factories. With more than 33,000 employees Sika generates annual sales of CHF 10.5 billion (£9.28 bn). We are also committed to providing quality, service, safety and environmental care.

In the UK and Ireland, we provide market-leading solutions for concrete, waterproofing, roofing, flooring, refurbishment, sealing & bonding, and industry, and have manufacturing sites in Welwyn Garden City, Preston, Leeds, Wishaw and Dublin with around 1000 employees and a turnover of more than £360 million.

The information, and, in particular, the recommendations relating to the application and end use of Sika® products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. Please refer to our homepage [www.sika.ie](http://www.sika.ie) for our current standard terms & conditions applicable to all orders. Users should always refer to the most recent issue of the Product Data Sheet for the product concerned, copies of which will be supplied on request.



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