

TOTAL CORROSION MANAGEMENT

(TCM®)

The global leader in concrete repair and protection, corrosion inhibition and structural strengthening systems. All are supported by the most highly trained and experienced sales and technical support network in the industry.

FULL RANGE OF PRODUCTS:

- Sacrificial anodes
- Surface-applied inhibitors
- High performance coatings
- Reinforcing steel coatings
- Concrete repair mortars
- Waterproofing systems
- Mixed systems (combination of the above)



Your Sika sales representative can offer these combined solutions to support your complete project requirements for corrosion management.

SIKA TOTAL CORROSION MANAGEMENT SUMMARY

PRODUCT	BEST USE	TARGET	INITIAL COST
Sika FerroGard 901	New Construction and admixture to any repair mortar	Protect anodes and cathodes throughout the structure or “ring anode” and added protection in repairs	\$
Sika CNI	New Construction	Protect anodes throughout the structure	\$
Sika FerroGard 903, 908	Low to medium chlorides, carbonation, early maintenance, ring-anode treatment, reduce moderate existing corrosion	Protect anodes and cathodes throughout the structure, reduce active corrosion	\$
Sikagard Coatings	Preventative on existing structures. Supplement to Sika FerroGard 903 and Sika Galvashield	Prevent ingress of chlorides, carbonation and water	\$
Sika FerroGard 650, 670, 675	Ring-anode protection; high chlorides where inhibitor may be limited	Protection of steel adjacent to patch, “ring anode” prevention	\$ \$

Sika FerroGard® 908

DESCRIPTION OF TECHNOLOGY

Sika® FerroGard®-908 is a dual-functional surface-applied, corrosion inhibitor that contains silane and amino alcohol inhibitors.

HOW IT WORKS

Sika FerroGard 908 is applied to the concrete surface, reduces active corrosion, increases resistivity of concrete and repels additional water and chloride ions.

BEST USE

Sika® FerroGard®-908® is recommended for steel-reinforced concrete, pre-stressed, precast, post tensioned concrete or concrete in marine environments. Common applications include:

- Bridges and highways exposed to corrosive environments (deicing salts, weathering)
- Building facades and balconies
- Parking garages
- Piers, piles, and concrete dock structures
- Vertical, horizontal and overhead surfaces
- As part of Sika's system approach for buildings and civil engineering

CASE STUDY

PROJECT

Mazza Galerie, NW Washington DC

DESCRIPTION OF STRUCTURE

This parking garage accommodates those who visit the Mazza Galerie in NW Washington DC, a luxury retail, dining, and entertainment complex. The structure was built in 1978 and spans 4 levels below grade.

PROBLEM

The interior garage decks beneath the popular Mazza Gallerie have been exposed to many years of water and deicing salts carried in with the busy traffic frequenting the retail stores. Severe corrosion of the cast-in-place concrete reinforcement developed causing cracking and spalling of the concrete. This damage was concerning to the health of the structure and unappealing to the patrons.

SOLUTION

Areas of spalled and delaminated concrete were completely removed and replaced with full depth ready mix concrete. The entire area was shotblasted to prepare the surface. Sika FerroGard 908, a dual-functional corrosion inhibitor was then sprayed to penetrate the concrete particularly to treat the areas undergoing latent corrosion where the steel reinforcement was in an elevated concentration of chlorides. Next all the joints and cracks were sealed with Sikaflex 2c NS EZ Mix, a polyurethane-based, elastomeric sealant. To complete the protection and create a seamless, bright, and attractive appearance, the Sikalastic 720/745 AL Gray traffic bearing membrane was installed. This coating system will stop further entry of water and deleterious elements while enduring the pedestrian and vehicular traffic. To ensure the quality of the repair and protection strategy, corrosion rate monitoring is performed by a corrosion consultant. It is expected that corrosion rates will remain passive.

