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PROTECTIVE COATINGS EXPERT

# The Leading Protective Coatings Magazine

January - March 2023



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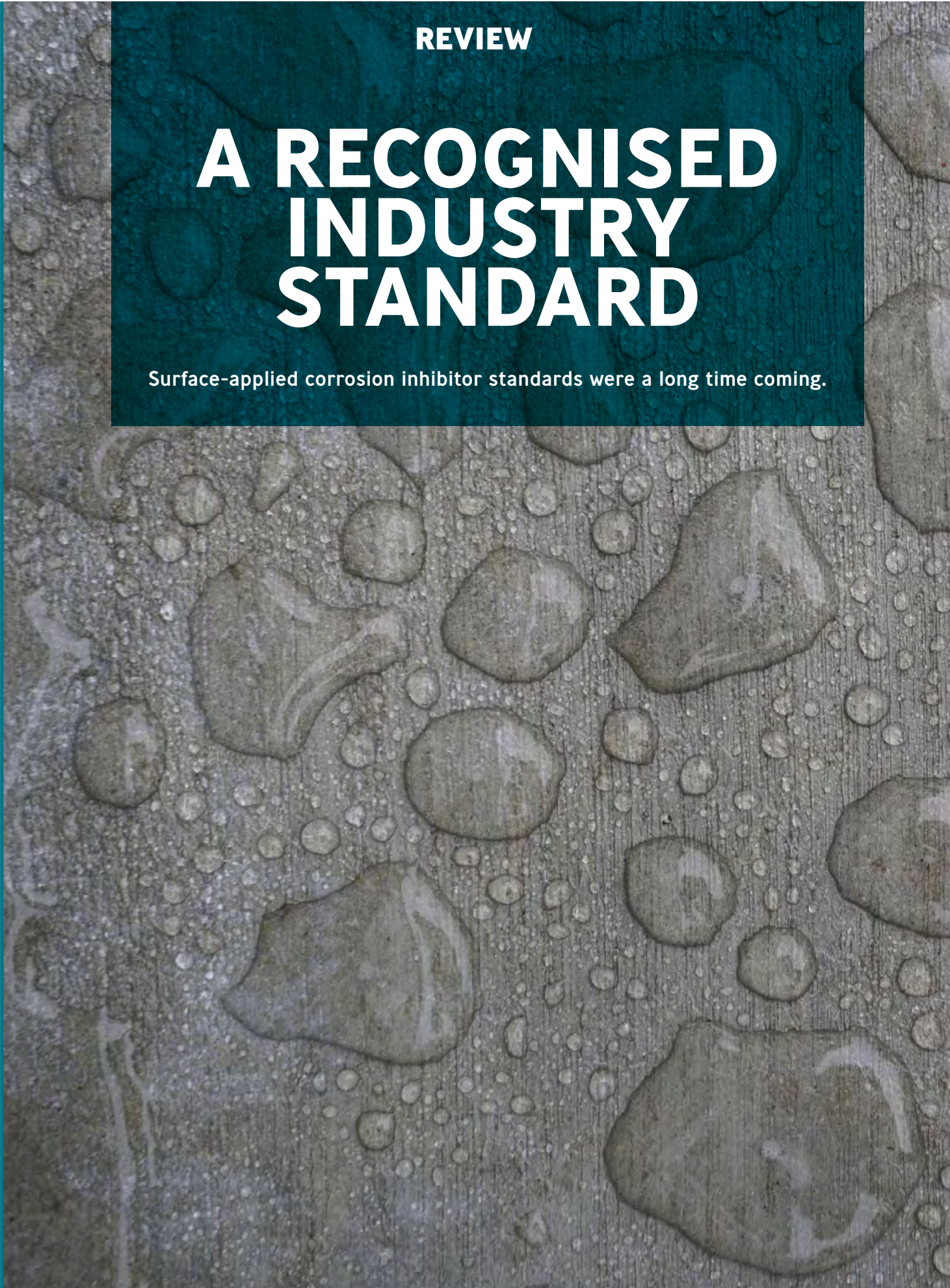
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**REVIEW**

# **A RECOGNISED INDUSTRY STANDARD**

Surface-applied corrosion inhibitor standards were a long time coming.









Industry standards are an excellent source of best practices recommended by the experts. Many new construction guidelines exist on the protection of reinforced concrete structures. However, it took almost two decades of preparation before the first standard on surface-applied corrosion inhibitors (SACIs) emerged as *ICRI Guideline No. 510.2-2019*. The resulting document is an excellent resource on why and how to apply SACIs to extend concrete service life. Furthermore, it lends confidence to contractors interested in using chemistries found in Cortec MCI SACIs.

### A groundbreaking standard

*ICRI Guideline No. 510.2-2019: Guide for Use of Penetrating Surface Applied Corrosion*

*Inhibitors for Corrosion Mitigation of Reinforced Concrete Structures* is the culmination of years of expert collaboration among members of the International Concrete Repair Institute (ICRI). This groundbreaking standard was published in 2019 and defines SACIs as corrosion inhibitors that penetrate through concrete and directly inhibit corrosion on the surface of the metal reinforcement, thus excluding chemistries that act as pore blockers only. It covers known technologies on the market at the time of publication and offers tips on surface prep, application, and detection/assessment.

### Cortec MCIs and the ICRI Standard

Cortec's MCI SACI chemistries fall under the ICRI descriptions of ambiodic (mixed) inhibitors. They include MCI-2018, MCI-2019, MCI-2020,



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and MCI-2021, to name a few. The best SACI to use for a particular product varies from application to application. Factors such as environmental conditions, budget parameters, and the application of water protection products all figure in the decision-making. For example, those in search of the MCI SACI with the highest concentration of corrosion inhibitors may opt for MCI-2020.

Those looking for convenient two-in-one corrosion protection and water repellency may select MCI-2018, which combines Migrating Corrosion Inhibitors with a 100% silane water repellent. MCI-2019, containing Migrating Corrosion Inhibitors and a 40% silane water repellent, may be preferred by those seeking to stay within a more limited budget. When tested according to the US Bureau of Reclamation

M-82 Protocol (one of the few existing test methods for SACIs), these three surface treatments showed a significant reduction of corrosion and cracking in the presence of high chloride exposure.

### **Another reason to choose MCI**

The limited availability of standard specifications and test methods on SACIs makes *ICRI Guideline No. 510.2-2019* even more valuable as an industry guide. While MCI SACIs have their own intrinsic qualities of convenience and good performance, the fact that their underlying chemistries are also featured in the ICRI guideline is just one more reason to adopt them as a viable and industry-accepted means of corrosion mitigation on existing concrete structures. ■

