



MIGRATORY CORROSION INHIBITOR (MCI®) PRODUCTS FOR CONCRETE



CASE HISTORY

Restoration of UW Milwaukee Student Residence Halls



PROBLEM

Sandburg Hall at the University of Wisconsin, Milwaukee, is comprised of four residence towers. Three of these are cast-in-place concrete towers that were built in 1970 and started to suffer from rebar corrosion by 2015. Rust jacking had caused concrete to spall, break loose, and drop to the ground surrounding the buildings. Through visual examination and sounding of the buildings' tower façades, it was discovered that spalling was taking place in areas where steel reinforcement had inadequate concrete cover. Many areas of inadequate cover were found on all three towers.

APPLICATION

After performing standard repairs, a single coat of MCI®-2019 was applied to the buildings' surfaces. Normally, a standard 40% solids silane water repellent would have been used following the repairs to reduce moisture penetration. However, the owner and engineer chose to use MCI®-2019 because it involved the application of a single product that would protect against moisture intrusion while keeping rebar corrosion rates lower with Migrating Corrosion Inhibitors. Another key factor in the selection of MCI®-2019 was its non-etching feature for glass, especially important since the windows of all three towers had recently been replaced, and protection of the windows and glazing was imperative.

DATE

July 2015

DISTRIBUTOR

LYCON, Inc./S.M.A.R.T. Distribution

SPECIFYING ENGINEER

Bloom Companies; Harry Farchmin

LOCATION

Milwaukee, Wisconsin

PRODUCTS

MCI®-2019



MIGRATING CORROSION INHIBITORS
FROM GREY TO GREEN

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CONCLUSION

The owners, engineers, and contractors were all very impressed with the easy application of MCI®-2019. Excellent repellency results were achieved while also providing corrosion protection to the rebar. As a result, specifying engineer Harry Farchmin commented, “MCI®-2019 provided a cost-effective solution in applying both a migrating corrosion inhibitor and a silane sealer in a single product in one application with no resulting color change to concrete façade[s].”



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