Crescent Beach Club Condominium, Florida

Protection to Walkways, Stairs and Balconies

Year of Treatment: 2009
Anode Used: Elgard E100 MMO Titanium Ribbon Mesh
Monitoring Used: C-Probe CP10P and CP101
Management System: C-Probe AchillesICP
Additional Treatments: Traditional Concrete Repair

Description:

C-Probe has assisted Burlington Engineering and Project Management, Inc., Florida on behalf of the Crescent Beach Club Condominium owners with the design, supply, installation support and commissioning of an Impressed Current Cathodic Protection (ICCP) system to protect the reinforcement steel within the walkways, stairs and balconies of the building.

The principal damage could be seen visually as spalled concrete and cracking along the line of reinforcement due to the tensile forces arising from corrosion processes.

The restoration project involved a comprehensive concrete repair process and in conjunction with the ICCP system. The ribbon anodes were installed to the concrete surfaces in a series of chases and backfilled with a low resistivity cementitious repair mortar.

The ICCP system is divided into 11 vertical zones to allow intimate control and monitoring of different sections of the building with the cabling for each zone being routed externally into the parking garage where the system electronic units

The system ICCP was commissioned October 2009 and data is taken using the remote assessment system, AchillesICP, regularly to map the effectiveness of the ICCP system around the building. This will allow C-Probe to trend the reaction of the steel to the applied protection current in each zone.