



PROJECT PROFILE

Marina City

Investigation and Restoration of Facade | Chicago, IL



CLIENT

Marina Towers Condominium Association

BACKGROUND

The twin towers of Marina City are sixty-story, residential, high-rise buildings that are part of a mixed-use complex on Chicago's near north side. Designed by Bertrand Goldberg Associates, the towers are one of the more architecturally significant buildings constructed in Chicago since World War II. The towers were the tallest reinforced concrete buildings in the world when they were completed in 1962.

The Marina Towers Condominium Association retained WJE to investigate the condition of the exposed concrete facade and balconies. The investigation was focused on significant concrete deterioration and water infiltration on the facade and balconies. WJE performed an inspection of the facade and developed repair drawings and specifications to address the deterioration. The performance of concrete repairs and application of waterproof coatings has preserved the structure and extended the useful life of these iconic buildings.



SOLUTION

In 1991, WJE conducted an investigation of the high-rise facade that revealed significant concrete deterioration due to the high chloride content. WJE developed repair drawings and specifications to address the deterioration. Major concrete repairs were performed on the facade and balconies at that time, and in some cases, extensive full-depth concrete repairs were required. Following the completion of the concrete repairs, waterproofing membranes were applied to a portion of the balconies and an architectural coating was re-applied to the facade to reduce the ongoing corrosion of the embedded reinforcement.



Multiple facade repair projects have been performed since the initial repair project was completed in 1991; however, the amount of concrete repairs required has been significantly reduced. The concrete repair work and application of waterproof coatings has significantly reduced the rate of concrete deterioration and amount of repairs required, thereby preserving this important architectural and structural engineering landmark.