



The Hemmingway House Condominium Building is a 30-story concrete frame structure completed in 1969. The exterior facade of the building consists of exposed concrete columns, slab edges and beams; infill brick masonry walls, and aluminum frame windows. The Association requested that BTC evaluate the condition of the exterior walls and windows; and identify potential causes of systemic interior water leakage.

In order to perform this evaluation and water leakage investigation, BTC performed an interior survey of areas with reported water infiltration. BTC then performed an up-close visual review of exterior walls from swing stage scaffolding. In an attempt to re-create known leaks, several water testing methods were employed. Water testing consisted of masonry cavity drainage testing in general accordance with ASTM C1715, and calibrated spray nozzle testing, similar to procedures outlined by AAMA 501.2-09. Upon completion of water testing, BTC directed a masonry restoration contractor in making and repairing exploratory openings through the facade in order to review the configuration of the exterior walls and wall components, and assess deficiencies that may be contributing to interior water leakage.

BTC provided a comprehensive report including field observations, water test results, conclusions, and recommendations. Recommendations for 5 distinct repair options were developed for consideration by the Board of Directors. Each option included a discussion of advantages, disadvantages, and probable construction costs. A life-cycle cost analysis was also performed in order to assist the Board of Directors in evaluating the long-term cost implications of the different repair options over a 50-year period.

**Project Name:**  
Hemmingway House Condominium Building

**Project Location:**  
Chicago, Illinois

**Client:**  
Hemmingway House Condominium Association  
1850 North Clark Street  
Chicago, Illinois

**Approximate Construction Cost:**  
Not Available

**Year Completed:**  
2011

**Nature of Services:**  
Evaluation of Water Leakage through Exterior Walls and Windows, Water Testing, Development of Repair Options, Life-Cycle Cost Analysis

