



The Buckingham Residences is a 44-story structure with a mechanical penthouse. The building was built in the early 1980's and consists of 305 residential units.

The 44th floor of the building consists of amenity spaces, including a fitness center and indoor lap pool. The pool is constructed of steel plates and is supported on structural steel members. It is a 25-yard lap pool with a width of approximately 20 feet.

Ongoing water leakage issues had been reported below the pool area in the unit below. As such, the Association had considered restoring or replacing the pool. Our services were requested to perform an evaluation of the pool to determine if its replacement is justified. BTC performed an initial evaluation and prepared a report that outlined our findings. In that report, our conclusions and recommendations indicated that proper integration of the existing waterproofing of the deck at the curb appears to be required to prevent further corrosion. To further evaluate this conclusion, it was recommended that a supplemental evaluation consisting of water testing be performed along the perimeter of the pool and pool deck.

BTC then performed this supplemental evaluation and water testing along the pool deck. The testing resulted in water leakage along the curb to pool deck interface, at floor registers, and at the pool's gutter drain. These observations indicated that there are several deficiencies that are causing the observed staining in the unit below and corrosion of the steel framing members. The leakage along the curb also suggested a deficiency in the waterproofing and/or a lack of proper integration at the gutter, which appears to be the primary cause of the observed corrosion. Adhesive failure of the sealant joint between the ceramic tile and stainless steel gutter likely exacerbated this issue. BTC provided recommendations for the repair and restoration of the pool deck that were later implemented.

Project Name:
Indoor Pool Evaluation

Project Location:
*Buckingham Residences
Chicago, Illinois*

Client:
*Associa Chicagoland
360 East Randolph Street
Chicago, Illinois 60601*

Approximate Construction Cost:
N/A

Year Performed:
2020-2021

Nature of Services:
*Evaluate Existing Pool Conditions,
Code Compliance, Water Leakage
Testing*

