



The 474 North Lake Shore Drive building is a 61-story, 505-unit, multi-family condominium building. The building was constructed as apartments in 1990 and converted to condominiums in 2005. The building's exterior is clad with precast concrete panels and aluminum frame windows. The first 15 floors of the building are a parking garage. Precast concrete louvers take the place of windows at the parking garage levels.

Significant deterioration of the east elevation concrete louvers was noted during a critical examination performed by BTC in 2008. Much of the observed deterioration was attributed to direct exposure to salt spray from heavily traveled Lake Shore Drive within 20 feet from the east elevation of the building. BTC was retained to design repairs for the deteriorated concrete.

A typical louver repair included removal of loose material down to sound concrete, cleaning and painting existing reinforcing steel, installing supplemental reinforcing steel where needed, installation of a new concrete patch material, and application of an acrylic waterproofing sealer. Other repairs included routing and sealing cracks, patch repairs of the exposed aggregate precast panels, and application of a clear water repellent at the first 15 floors of precast panels.

BTC also provided bidding assistance and field observation services during the construction phase of the project.

Project Name:
East Elevation Louver Repairs

Project Location:
*474 North Lake Shore Drive
Chicago, Illinois*

Client:
*474 North Lake Shore Drive
Condominium Association; DK Condo*

Approximate Construction Cost:
\$160,000

Year Completed:
2009

Nature of Services:
*Precast Concrete Louver Repair Design,
Bidding Assistance, and Construction
Phase Services*

