

The 111 East Chestnut building is a 57-story concrete-framed structure completed in 1972. Floors 10 through 57 (Tower) include residential condominiums. The lower 9 floors include a parking garage, restaurant, and commercial space.

The exterior facade of the Tower consists of exposed concrete columns and slab edges. A City of Chicago Critical Exa mination performed by BTC in 2007 indicated signific ant deterioration to these concrete facade components. Deterioration was primarily due to corrosion of embedded reinforcing steel and freeze-thaw cycles. Several years prior to this evaluation, the windows in the building had been replaced. The new windows were set closer to the interior of the building than the original windows. As such, a much greater surface area of the slab edges were exposed to freezethaw cycles and water penetration than prior to the window replacement project, resulting in more deterioration. A repair program was developed to address the deterioration.

Repairs to address deterioration were performed in 2 phases over a 2-year period. Upon removal of deteriorated concrete slab edges at many locations, the deterioration was found to extend into the residential units. Repairs at these locations required interior dust protection, demolition within units, and temporary weather protection over openings to the exterior. These hidden conditions signific antly increased the cost of the project.

## Project Name:

Exterior Facade Repairs
The 111 East C hestnut Building
Project Location:
Chicago, Illinois
Client
111 East Chestnut C ondominium Assoc iation
111 East C hestnut Street
Chicago, Illinois
Approximate Construction Cost \$2,150,000

Year Completed:
2010
Nature of Services:
Evaluation, Repa ir Design, Bidding
Assistance, and Construction Phase Services


