



Originally constructed in the 1950s, the 7-story residential building at 2300 North Commonwealth Avenue consists of a reinforced concrete structure. Exterior walls have generally been constructed using multi-wythe brick masonry. The roof of the building consists of a low-slope modified bitumen roofing system with an outdoor deck area.

The building was converted to condominiums in 2006. At the time of conversion, a replacement modified bitumen roofing system was installed. Shortly after the conversion, leaks into several 7<sup>th</sup> floor units were reported. Therefore, the Association retained BTC to perform an evaluation of the roofing systems and parapet walls at the building.

Exploratory openings through the roof and parapet walls made during the investigation revealed many deficiencies, including saturated roof insulation. Due to the observed moisture-saturated roof board insulation, among other issues, complete roofing system replacement was deemed necessary. With BTC's assistance, the roofing system manufacturer provided new materials under its warranty obligations.

To address parapet wall deficiencies and ensure the new roofing system would be properly integrated with the parapet walls, the Association elected to authorize parapet wall reconstruction. BTC's repair design included a new cavity wall system, designed with expansion joints to allow lateral movement of the veneer along the 200-foot long building. The reconstructed parapet walls were isolated from the existing wall segments below using custom fabricated cavity bridges and through-wall flashing along the base of the parapets.

BTC also provided bidding assistance and construction contract administration services during the construction phase of the project.

**Project Name:**  
*Parapet Wall and Roofing System Replacement, 2300 North Commonwealth Condominiums*

**Project Location:**  
*2300 North Commonwealth Avenue  
Chicago, Illinois*

**Client:**  
*2300 North Commonwealth Condominiums  
2300 North Commonwealth Avenue  
Chicago, Illinois 60614*

**Approximate Construction Cost:**  
*\$600,000*

**Year Completed:**  
*2014*

**Nature of Services:**  
*Evaluation, Design of Parapet Wall and Roofing System Replacement, Bidding Assistance, and Construction Phase Services*

