



Project Profile



State Place is a 4-building residential and commercial development. The development consists of three 7-story midrise buildings and a 24-story high-rise tower. The mid-rise buildings include private set-back terraces on the 7th floor that are partially located over residential units on the 6th floor. Portions of the terraces consist of a concrete topping slab over a waterproofing membrane. Due to reports of interior gypsum sheathing deterioration in several 6th floor units, the Association retained BTC to evaluate the sources of moisture intrusion and interior damage.

BTC performed hydrostatic water testing on the terraces in a methodical manner to isolate terrace drains from the concrete topping slab and waterproofing membrane. Masonry weep testing was also performed to evaluate the effectiveness of the 7th floor exterior masonry wall drainage system.

Due to the pattern of observed deterioration within the units, BTC also evaluated the susceptibility of building components to condensation during winter months. This evaluation consisted of a visual review, interior exploratory openings, review of historical weather data, and infrared thermography.

BTC concluded that bulk water leakage and condensation related issues both contributed to the interior finish deterioration. To address the bulk water leakage issues, several repair approaches were employed. Complete waterproofing system replacement was required at some locations. At other locations, localized repairs around the drains were performed, saving the Association considerable costs on a first-cost basis. Condensation potential was addressed through application of closed-cell polyurethane foam insulation and ductwork joint repairs from inside the 6th floor units.

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

Project Name:

*Terrace Waterproofing Repairs
State Place Condominiums*

Project Location:

*1101 through 1155 South State Street
Chicago, Illinois*

Client:

*State Place Condominiums
1101 South State Street
Chicago, Illinois 60208*

Approximate Construction Cost:

\$100,000

Year Completed:

2014

Nature of Services:

*Evaluation of Moisture Intrusion,
Waterproofing System Repair Design,
Bidding Assistance, and Construction
Phase Services.*

