Project Profile

The AMLI Deerfield Development includes a new 4-story, 240-unit residential wood-framed building. The building is constructed around a 4-story, 273-space, precast concrete parking garage and a courtyard area. Exterior wall finishes include brick with cast stone accents, and fiber cement siding and trim. The roofing system over the garage is a single-ply membrane, and the roofing system over the residential building is modified bitumen. Fenestrations on the upper floors are comprised of vinyl windows and swinging balcony doors. Aluminum storefronts are located along some ground level areas.

BTC was retained to provide building envelope consulting services during the construction phase of the project. Our scope of work was focused on review of relevant building envelope submittals and field observations during critical stages of roofing, exterior wall, and fenestration installation.

BTC consulted regarding several design and value engineering issues during the initial phases of construction. These issues included roofing and exterior wall system assemblies, selection of weather-resistive and vapor retarder materials, and placement of insulation and vapor retarders within wall assemblies. BTC analyzed several alternative roofing assemblies using hygrothermal computer modeling to evaluate anticipated performance of various assemblies.

BTC's input was also solicited when changes in materials and systems were needed to accommodate winter construction. In addition, BTC performed a review of critical building envelope mock-ups and suggested adjustments in details to accommodate constructability, and improve performance.

Project Name:
Building Envelope Consulting Services
AMLI Deerfield Development

Project Location:
1525 Lake Cook Road
Deerfield, Illinois

Client:
AMLI Residential
200 West Monroe Street, Suite 2200
Chicago, Illinois 60606

Approximate Construction Cost:
Confidential

Year Completed:
2015

Nature of Services:
Design Document Review, Submittal Review, Mock-up Review, and Field Observation Services