



# Alexis Brackney, S.E., AIA

## ENGINEER III & GROUP DIRECTOR

Ms. Brackney is the director of CTLGroup's Building Science Group in Skokie, Illinois. She specializes in forensic investigations, condition assessments, and rehabilitation of a variety of concrete, masonry, and steel structures. Her project experience includes field investigations, research and condition assessments of architectural and structural systems, building envelope evaluations, repair design, and litigation support. She also investigates damage to residential and commercial properties resulting from severe weather events for major insurance carriers and property owners.

Throughout her career at CTLGroup, Ms. Brackney has conducted building envelope inspections of residential and commercial buildings and structures, performed evaluations and repairs of parking garages, condominiums, municipal buildings, hospitals, educational facilities, and water treatment plant structures, and evaluations and rehabilitation of historic buildings.

### Industry Experience

11 Years with CTLGroup

2 Years with Other Firms

13 Years Industry Experience

### Academic Credentials

M. Arch, Structures Option  
University of Illinois at Urbana-  
Champaign, 2009

B.S. in Architectural Studies  
University of Illinois at Urbana-  
Champaign, 2007

### Licensure/Certification

Licensed Architect  
IL, IN, FL, MI, NY, SC, TX, WI

Licensed Structural Engineer: IL  
National Council of Architectural  
Registration Boards (NCARB)  
Certificate Holder

### Professional Affiliations

American Institute of Architects  
Building Enclosure Council -  
Chicago

### Contact Information

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Skokie, IL 60077  
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### Representative Project Experience

#### Building Envelope

- Retained to conduct a façade assessment of a university residence hall at Western Illinois University and provide recommendations for repair/replacement of the exterior cladding. Work included site evaluation, cladding design, preparation of bid documents, project management, and construction observation of a \$27 million recladding project.
- Performed detailed façade inspection and repairs for University Hall in Chicago, Illinois. Work included documentation of existing conditions, development of construction documents for repairs, sample removal and analysis, and repair observations. The project included repair of precast window panels, patching of concrete façade elements, and repair of exterior roof systems.
- Conducted façade inspections for several mid-rise precast concrete parking structures in Chicago, Illinois. Work included close-up façade inspections, repair recommendations, and preparation of report documents to comply with the City of Chicago exterior wall ordinance.
- Performed façade evaluation and assessment of exterior windows in a historic condominium structure in Chicago, Illinois. Work included site assessments, architectural consulting related to interior renovations, window repair/replacement, code research, and report preparation.
- Retained to provide architectural consulting related to water leakage through masonry exterior walls in multi-family residential building. Work included field investigation, water testing, repair recommendations, and report preparation.

#### Failure Investigation

- Investigated the partial roof collapse of a steel-framed warehouse facility in Illinois following a severe weather event. Assessed original design and as-built conditions, provided findings relative to the cause of the partial collapse, and recommended conceptual repairs.
- Investigated the partial collapse of a sloped green roof over a metal-framed office building in Illinois. Assessed original design and as-built conditions, provided input on site demolition protocol and soil sampling, and prepared presentation on initial findings.
- Investigated the failure of a precast panel at a parking garage in Milwaukee. Performed field assessment and documentation of as-built conditions of remaining panels, review of original design, and provided figures and analysis for the report.

- Investigated several residential wind and hail damage claims in Illinois. Work is ongoing and includes site investigation, analysis, causation reporting, and conceptual repair recommendations.
- Investigated fire damage to a multi-family residential building in Illinois. Work included site investigation, code research, analysis, and report preparation.

#### **Litigation Support**

- Investigated concrete defects during construction of a high-rise building in Nevada. Work included site investigation, destructive testing observations, analysis, and report preparation.
- Investigated concrete defects related to construction of a bridge in New York. Work included document review, code research, and report preparation.
- Provided litigation support and document review to determine whether the roof design, the roof installation, and/or the roof products have contributed to performance problems at several membrane roofs installed during a hospital building expansion in Oklahoma.
- Evaluated cracking in reinforced concrete filter basins at a water treatment plant in California. Work included site investigation, analysis of core samples, drawings, review of project documents, and summary documents for mediation assistance.

#### **Structural Evaluation and Rehabilitation**

- Evaluated several reinforced concrete structures at a water treatment facility including filter basins, clearwells, settling basins, shore wells, and finished water reservoirs. Work included field inspection, sample analysis, laboratory testing plan, report preparation, and repair recommendations. Field evaluation also included all exterior masonry walls at the facility to document current conditions and provide immediate and long-term repair recommendations.
- Evaluation and repair of several precast parking garages in Illinois. Work included field inspection, sample analysis, report preparation, and repair recommendations. Repair work included repair design, contract documents, bidding assistance, construction administration, and observations of repairs.
- Provided field evaluation including visual inspection, hammer sounding, and concrete cover measurements for a reinforced concrete chlorine contact basin in Illinois.
- Provided consulting services related to the stabilization and repair of settlement distress of a heavy timber and masonry building in Chicago, Illinois. Work included site evaluation, preparation of construction documents, specifications for repairs, and construction observation of repair work.
- Provided consulting services related to a condominium structure in Chicago, Illinois. Work included site assessments, architectural consulting related to interior renovations, window repair/replacement, code research, and report preparation.
- Retained to provide architectural consulting related to water leakage through masonry exterior walls in multi-family residential building. Work included field investigation, water testing, repair recommendations, and report preparation.