



EDUCATION

- University of Connecticut
 - Bachelor of Science, Civil and Environmental Engineering, 2007
- The Pennsylvania State University
 - Master of Science, Architectural Engineering, 2009

PRACTICE AREAS

- Facade Assessment and Repair
- Building Enclosure Consulting
- Building Enclosure Commissioning (BECx)
- Curtain Walls and Windows
- Facade Failure, Leakage, and Investigation
- Repair and Rehabilitation Design
- Architectural Testing

REGISTRATIONS

- Professional Engineer in IL and PA
- Registered Exterior Wall Consultant

PROFESSIONAL AFFILIATIONS

- International Institute of Building Enclosure Consultants

CONTACT

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EXPERIENCE

Bill O'Brien has contributed to numerous projects focusing on building enclosures, including facade assessments, building enclosure commissioning (BECx), water leakage and failure investigation, repair design, and architectural testing. These projects primarily involve glass curtain wall, various window assembly, metal panel, masonry wall, precast and cast-in-place concrete, waterproofing, and roofing systems. Mr. O'Brien has also assisted with structural evaluation and testing of various building systems. Overall, his project experience ranges from single family residential to hospital, education, and high-rise buildings.

Mr. O'Brien has presented and authored papers on condensation control from air transport in cold climates and lessons learned from a design phase mock-up for a custom recladding design for the U.S. Air Force Academy Cadet Chapel. He has guest lectured at the Pennsylvania State University for the Dept. of Architectural Engineering. Prior to joining WJE in 2012, Mr. O'Brien was part of the building sciences consulting group of Architectural Testing, Inc. As a graduate research assistant at the Pennsylvania State University, his laboratory testing and research publications were dedicated to advancing the understanding of the seismic performance of glass curtain wall and storefront systems. As a consultant for the Applied Technology Council (ATC), Mr. O'Brien developed analytical models to predict the seismic capacity of glazing systems as part of the performance-based design method.

REPRESENTATIVE PROJECTS

Facade Assessment and Repair

- U.S. Air Force Academy Cadet Chapel - Colorado Springs, CO: Design document development for metal and glass recladding repairs and design phase mock-up services
- 111 West Wacker - Chicago, IL: Facade prepurchase survey, glass replacement repair, repair phase observations, and investigation of interior condensation for high-rise residential building with unitized curtain wall
- 353 North Clark - Chicago, IL: Investigation of decorative glass fins and facade access, glass fin connection repair, and observations for high-rise commercial building with unitized curtain wall

Building Enclosure Consulting

- Willis Tower - Chicago, IL: Facade assessment and city facade report for 104-story building clad with aluminum and glass curtain wall
- Children's Hospital of Wisconsin - Wauwatosa: Repair design to correct condensation leakage for precast walls; design peer review, submittal review, mockup, and construction review of ambulatory expansion with cassette curtain wall
- Argonne National Laboratory Materials Design Laboratory - Lemont, IL: Submittal review and construction observation for laboratory with curtain wall and metal panels

Building Enclosure Commissioning

- Iowa State University Student Innovation Center - Ames: BECx of pleated unitized curtain wall, metal panel, and roofing systems for iconic "jewel-box" education facility, including submittal review, laboratory performance mock-up review, and construction and testing observation
- University of Iowa Children's Hospital and Pediatric Cardiac Catheterization Laboratory Expansion - Iowa City: BECx of Norman Foster- designed enclosure with custom unitized curtain wall, including submittal review and construction phase services
- Ames High School - Ames, IA: BECx including peer review, submittal review, construction observation of precast concrete, curtain wall, masonry, metal panel, and natatorium
- University of Pennsylvania Translational Research Center - Philadelphia: BECx of unitized curtain wall including fabrication plant visits and construction phase services

Facade Failure, Leakage, and Investigation

- University of Chicago, North Residence Hall - IL: Water leakage investigation and repair observation of unitized glass curtain wall
- Eagleton Federal Courthouse - St. Louis, MO: Thermal stack effect and door operability study including instrumentation, thermography, and interior/facade inspection
- Ascension Saint Clare's Hospital - Weston, WI: condensation investigation of hospital and medical office building complex
- 300 North LaSalle Street - Chicago, IL: Water leakage testing and repair for unitized wall