WJE

PERSONNEL QUALIFICATIONS

William C. O'Brien, Jr. | Senior Associate



EDUCATION

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

PRACTICE AREAS

- Building Enclosure Commissioning
- Building Enclosure Consulting
- Peer Review
- Curtain Walls and Windows
- Facade Assessment
- Water/Air Leakage Assessment
- Repair and Rehabilitation Design
- Architectural Testing

REGISTRATIONS

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

PROFESSIONAL AFFILIATIONS

- American Society of Heating, Refrigerating and Air-Conditioning Engineers
- International Institute of Building Enclosure Consultants

CONTACT

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EXPERIENCE

William O'Brien has extensive experience with building enclosure commissioning (BECx) and new construction consulting, peer review, facade assessments, investigation, and repair design for various forms of facade distress. His projects primarily involve evaluation of glass curtain wall and window assemblies, air barriers, metal cladding, masonry walls, architectural precast concrete, cast-in-place concrete, and stone panels. He has also performed structural evaluation and performance testing of various enclosure systems, with building types ranging from hospital, laboratory, education, and highrise structures to single-family residences.

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 and for the Illinois Institute of Technology.

REPRESENTATIVE PROJECTS

Building Enclosure Commissioning

- Iowa State University, Student Innovation Center - Ames: Building enclosure commissioning (BECx) for iconic "jewel box" education facility with pleated unitized curtain wall and metal panel cladding
- University of Iowa, Children's Hospital and Pediatric Cardiac Catheterization Laboratory -Iowa City: BECx for Norman Foster-designed enclosure with custom unitized curtain wall
- Argonne National Laboratory, Materials Design Laboratory - Lemont, IL: BECx for radiological laboratory research building with curtain wall, precast concrete, and metal panel cladding
- Ames High School Ames, IA: BECx for educational buildings and natatorium with precast concrete, curtain wall, masonry, and metal panel cladding
- Rush University Medical Center, Rubschlager Building - Chicago, IL: BECx for cancer and neuroscience outpatient care center with custom unitized curtain wall, masonry wall, and metal panel cladding

Building Enclosure Consulting/Curtain Walls and Windows

- St. Regis Chicago IL: Review and construction observation of custom window wall system
- Willis Tower Chicago, IL: Facade assessment and city facade report for 104-story building clad with aluminum and glass curtain wall
- Children's Wisconsin Wauwatosa: Design peer review, submittal review, mock-up, and new construction review of Craig Yabuki Tower with cassette curtain wall
- University of Chicago, North Residence Hall -IL: Water leakage investigation and repair observation of unitized glass 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

Facade Assessment

- Eagleton Federal Courthouse St. Louis, MO: Thermal stack effect and door operability study, including instrumentation, thermography, and interior/facade inspection; architectural precast concrete panel distress investigation and survey
- 225 West Washington Chicago, IL: Facade and sealant assessment, repair documents, and repair period services for commercial high-rise with precast and stone panels
- 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
- Ascension Saint Clare's Hospital Weston, WI: condensation investigation of hospital and medical office building complex

Repair and Rehabilitation Design

- 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
- Children's Wisconsin Wauwatosa: Repair design and repair period services to correct condensation leakage for precast walls of existing medical buildings
- 300 North LaSalle Street Chicago, IL: Water leakage testing and repair for unitized wall

