PERSONNEL QUALIFICATIONS

Andi Mele | Senior Associate

EDUCATION

- Illinois Institute of Technology
  - Bachelor of Science, Architectural Engineering, 2015
  - Master of Architectural Engineering, 2015

PRACTICE AREAS

- Building Enclosure Consulting
- Water/Air Leakage Assessment
- Facade Assessment
- Repair and Rehabilitation
- Windows and Curtain Walls
- Peer Review
- Hygrothermal Analysis

REGISTRATIONS

- Professional Engineer in IL
- NFRC Certified Simulator

PROFESSIONAL AFFILIATIONS

- National Fenestration Rating Council (NFRC)

CONTACT

amele@wje.com
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EXPERIENCE

Andi Mele joined WJE in 2015 and has since been involved in a variety of building enclosure investigation and repair projects.
He has performed observations during construction of new building enclosures and during repairs to existing systems. He has also conducted and witnessed numerous exterior envelope mock-up and field tests, including water leakage and air infiltration testing of air and weather barriers and window/curtain wall systems.

Mr. Mele has participated in peer reviews of exterior enclosures and assisted in the design of interface detailing with emphasis on constructability, water penetration resistance, and mitigating condensation potential. He has expertise in evaluating moisture related building enclosure issues through thermal and hygrothermal analysis of building assemblies.

As an NFRC Certified Simulator, Mr. Mele is proficient in the use of THERM and WINDOW to analyze thermal performance and localized heat transfer effects in building enclosures.

REPRESENTATIVE PROJECTS

Building Enclosure Consulting

- National Bio- and Agro-Defense Facility - Manhattan, KS: Exterior envelope design review and construction observation services including field testing
- Mercy Gilbert Medical Center - Gilbert, AZ: Exterior envelope design review and construction observation services including field testing
- Amherst College - Amherst, MA: Building enclosure commissioning services including design review and field testing observations

Water/Air Leakage Assessment

- The Salvation Army Kroc Center - Quincy, IL: Water leakage investigation; design of exterior envelope repairs
- Rubloff Building - Chicago, IL: Water leakage investigation; development of repair documents
- John A. Logan College - Carterville, Illinois: Moisture distress condition assessment, design review, and construction observation services

Facade Assessment

- AccorInvest Hotel Portfolio - Various Locations, Europe: Characterization of exterior cladding and wall assemblies through document review and field investigation
- First National Center - Oklahoma City, OK: Investigation of brick, limestone, and decorative metal exterior cladding distress conditions
- 5200 North Sheridan - Chicago, IL: Evaluation of brick and limestone masonry distress conditions, development of repair documents, and construction observation services
- Archdiocese of Chicago Parishes - IL: Multiple property assessment of exterior envelope; identification of and advising on conditions for maintenance/repair

Repair and Rehabilitation

- 135 Bishopsgate - London, UK: Water leakage investigation; development of integration detailing at roof/wall interface
- 300 South Wacker - Chicago, IL: Development of mechanical penthouse screen wall construction documents; construction observation services
- U.S. Federal Courthouse - Cedar Rapids, IA: Investigation of exterior envelope failure/storm damage and repair design-assist
- Knapp Center for Biomedical Diversity - Chicago, IL: Thermal analysis; development of documents for exterior wall assembly replacement

Windows and Curtain Walls

- Mercy Hospital Northwest Arkansas - Bentonville: Design review; air and water penetration field testing
- Pima County Administration Buildings - Tucson, AZ: Design and development of documents for curtain wall replacement
- Private Residence - Chicago, IL: Exterior envelope design review; thermal analysis
- Private Residence - New York, NY: Thermal analysis; observation of laboratory air, water, and structural mock-up testing