



## PERSONNEL QUALIFICATIONS

### Timothy S. Fitzgerald | Senior Associate



#### EDUCATION

- Oklahoma State University
  - Bachelor of Architectural Engineering, 2015
- Illinois Institute of Technology
  - Master of Structural Engineering, 2019

#### PRACTICE AREAS

- Failure/Damage Investigations
- Repair and Rehabilitation
- Structural Analysis/Computer Applications
- Facade Access Equipment
- Concrete Structures
- Structural Metals
- Instrumentation/Monitoring/Load Testing

#### REGISTRATIONS

- Professional Engineer in IL, KY, and WI
- Structural Engineer in IL

#### PROFESSIONAL AFFILIATIONS

- Structural Engineers Association of Illinois (SEAOI)

#### CONTACT

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#### EXPERIENCE

Timothy Fitzgerald joined WJE in 2015 and has experience with evaluation, analysis, repair, construction observation, and testing of existing structures. Mr. Fitzgerald's project work has encompassed a variety of structural materials, including reinforced concrete, prestressed concrete, structural steel, glass, aluminum, and wood. He also has experience with structural analysis computer software and finite element analysis.

Mr. Fitzgerald has experience performing assessment, repair design, and construction period services for reinforced concrete structures, including parking structures, plazas, balconies, and plenums. He has also provided consulting services related to fall protection requirements for elevated walking-working surfaces and the evaluation, analysis, and testing of facade access equipment.

#### REPRESENTATIVE PROJECTS

##### Failure/Damage Investigations

- Blast Damage Assessment and Investigation - Undisclosed Location: Post-blast event condition assessment, structural engineering, repair peer review, and blast overpressure and impulse estimation
- Crane Collapse - Undisclosed Location: Post-collapse structural investigation and structural analysis
- University of Missouri - Columbia: Investigation and analysis of cracking in insulated precast wall panels
- California University of Pennsylvania - Pittsburgh: Double-tee parking structure partial collapse investigation
- Four Overlook Point Garages - Lincolnshire, IL: Double-tee parking structure partial collapse, condition assessment, report, repair design, and construction period services
- Retaining Wall Collapse - St. Louis, MO: Structural investigation and repair development

##### Repair and Rehabilitation

- Tribune Tower Pioneer Court Plaza - Chicago, IL: Condition assessment, report, repair design, and construction services for outdoor plaza structure
- The Post Office - Chicago, IL: Condition assessment, repair design, and construction period services for outdoor plaza and plenum structure over railroad tracks and construction services for precast concrete double-tee parking structures
- Ecolab - Joliet, IL: Structural investigation, analysis, and repair design for open web steel roof joists

##### Structural Analysis/Computer Applications

- 111 South Wacker Drive- Chicago, IL: Finite element analysis of glass cable net wall structure
- New York Private Residences - Chicago, IL: Finite element analysis of reinforced concrete structure

##### Facade Access Equipment

- 150 North Michigan Avenue - Chicago, IL: Design and load testing of new and existing dedicated roof anchorages, davits, davit bases, and design and construction services for elevated catwalk structure
- University of Chicago Medicine - IL: Structural investigation, design, and construction period services to install dedicated roof anchorages at seven buildings
- 353 North Clark Street - Chicago, IL: Design and load testing of new and existing dedicated roof anchorages for facade access equipment
- 181 West Madison Street - Chicago, IL: Evaluation and load testing of existing facade access equipment
- 401 East Ontario Street - Chicago, IL: Design and load testing of new and existing dedicated roof anchorages for facade access equipment