PERSONNEL QUALIFICATIONS

Christine M. Freisinger | Principal

EDUCATION

- Illinois Institute of Technology
  - Bachelor of Science, Architectural Engineering, 2002
- University of Minnesota
  - Master of Science, Structural Engineering, 2004

PRACTICE AREAS

- Failure/Damage Investigations
- Stadiums and Arenas
- Repair and Rehabilitation
- Structural Analysis
- Historic Preservation

REGISTRATIONS

- Professional Engineer in IL
- Structural Engineer in IL

PROFESSIONAL AFFILIATIONS

- American Institute of Steel Construction
- Structural Engineers Association of Illinois, past president

TECHNICAL COMMITTEES

- AISC Task Committee 7 - Evaluation and Repair

CONTACT

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EXPERIENCE

Since joining WJE, Christine Freisinger has been involved in the investigation, evaluation, and repair of various structures, including stadiums, chapels, high-rise buildings, and warehouses. Her projects have included documentation of the condition of existing structures, evaluation of structures under various design and proposed loading conditions, and development of repair drawings. Ms. Freisinger's structural investigations have involved steel, timber, concrete, and masonry structures. She has developed expertise in historic framing systems and modeling unique structures for review of strength and serviceability.

REPRESENTATIVE PROJECTS

Failure/Damage Investigations

- Precast Parking Garage - Chicago, IL: Failure investigation of welded steel connections during construction
- Saint Michael's Parish - Orland Park, IL: Investigation of deteriorated glulam Tudor arches and repair design
- 125 South Clark Street - Chicago, IL: Investigation of clay tile arch damage and repair design
- Aquascape Roof Collapse - Saint Charles, IL: Investigation of built-up tapered steel girders supporting a green roof
- Sugar Warehouse - Cora, TX: Investigation of warehouse collapse associated with Hurricane Gustav
- Weyerhaeuser Warehouse Roof Collapse - Bowling Green, KY: Investigation of bottom-flange bracing of continuous steel girders
- Continental Refrigerated Services - University Park, IL: Investigation of storage rack failure
- 10 and 120 South Riverside Plaza - Chicago, IL: Investigation of deterioration of plenum over train tracks
- 509 North Union - Chicago, IL: Investigation and temporary shoring of floor framing

Stadiums and Arenas

- Aloha Stadium - Honolulu, HI: Investigation of steel stadium for wind and seismic loads and for replacement of concourse decks; structural repair of curved pedestrian bridges
- Arizona Cardinals Stadium - Phoenix: Investigation of reinforcing steel quantities in construction of stadium

Repair and Rehabilitation

- Prudential Plaza - Chicago, IL: Design of lateral system modifications to create three bay slab openings for monumental stair; design of three-story monumental bleacher stair for tenant build-out
- One North Dearborn - Chicago, IL: Design of two-story monumental stair with reinforcement of existing historic steel columns
- One North State - Chicago, IL: Design of monumental bleacher stair and modifications to existing rooftop deck
- Aon Center - Chicago, IL: Design of interior stairs and miscellaneous steel supports for tenant build-out for several adjacent floors
- CNA Center - Chicago, IL: Repair and coating of roof framing to support house rig
- Lakeview Presbyterian Church - Chicago, IL: Strengthening and repair of timber trusses
- Prudential Plaza - Chicago, IL: Investigation of roof framing for new roof deck; design of framing for installation of rooftop food truck and walk-in cooler

Structural Analysis

- Willis Tower Atmospheric Wave Wall - Chicago, IL: Analysis of custom steel brackets and panels
- Duke University - Durham, NC: Investigation of Guastavino vaulted ceiling system supported on stone ribs
- U.S. Air Force Academy Cadet Chapel - Colorado Springs, CO: Analysis of existing structural system for recladding repairs
- Lyric Opera of Chicago - IL: Analysis of exterior multistory temporary facade banners
- NBC Tower - Chicago, IL: Analysis of post-tensioned roof framing for house rig replacement
- Art Institute of Chicago, Ryerson Library - IL: Investigation of existing steel framing

Historic Preservation

- Second Presbyterian Church - Chicago, IL: Wood window restoration and steel frame design for Tiffany-stained glass windows at National Landmark church
- Gateway Arch - St. Louis, MO: Investigation of corrosion on stainless steel panels