PERSONNEL QUALIFICATIONS

Peter Tarara | Principal and Unit Manager

EDUCATION

- University of Iowa
  - Bachelor of Science, Civil Engineering, 2001
- Illinois Institute of Technology
  - Master of Science, Structural Engineering, 2007

PRACTICE AREAS

- Failure Investigation
- Field Testing
- Repair and Rehabilitation Design
- Reinforced Concrete Structures
- Precast Concrete Structures
- Steel Structures
- Structural Evaluation and Analysis

REGISTRATIONS

- Professional Engineer in IL
- Structural Engineer in IL

PROFESSIONAL AFFILIATIONS

- American Concrete Institute (ACI)
- Precast/Prestressed Concrete Institute (PCI)
- Structural Engineers Association of Illinois (SEAOI)

TECHNICAL COMMITTEES

- ACI 362 - Parking Structures
- ACI 364 - Rehabilitation
- ACI 546 - Repair
- PCI - Parking Structures
- PCI - Precast Insulated Wall Panels

CONTACT

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EXPERIENCE

Peter Tarara has broad-based experience with structural investigations, evaluations, analyses, and strengthening of existing structures. His analytical work has included using computer models to analyze various structures.

Mr. Tarara has led restoration projects for several historic, modern, and architecturally significant structures, which have included various repair techniques and materials. His expertise mainly involves the restoration of reinforced concrete structures, including facades, balconies, plazas, and parking structures. These projects have been completed from the investigation through the development of repair documents and construction observation stages. Mr. Tarara has also worked on several precast concrete structures, including the investigation and repair of insulated wall panels, double-tee beams, and connections. Much of this work has included field and laboratory testing.

Mr. Tarara is a member of several American Concrete Institute and Precast/Prestressed Concrete Institute technical committees. He serves as chair of ACI 546 - Repair, is the former subcommittee chair of ACI 546-0C, Concrete Repair Guide, and is the former Secretary of ACI Subcommittee ACI-546-OD, Packaged Materials. Mr. Tarara has given many presentations on the repair of concrete structures. He also coauthored and presented a paper, *Distress and Repair of Precast Parking Structure Decks*, for the Precast/Prestressed Concrete Institute.

REPRESENTATIVE PROJECTS

Failure Investigation

- 4 Overlook Point - Lincolnshire, IL: Investigation and repair of precast double-tee flange failure and flange-to-flange connections
- 8216 South Racine - Chicago, IL: Investigation of partial structural collapse of building under construction
- PetSmart Warehouse - Ottawa, IL: Investigation of precast wall panel collapse
- 222 Locust Street - Elgin, IL: Investigation of punching shear slab failure

Field Testing

- Amazon Warehouse - Akron, OK: Load testing of precast wall panel connections
- Midway Airport, Terminal Garage - Chicago, IL: Failure investigation, field and laboratory testing, and repair of cable barrier restraint system
- Jefferson National Expansion Memorial (Gateway Arch) - St. Louis, MO: Field and laboratory testing and repair of concrete overlay on overlook stairs
- Midway Airport, Economy Parking Garage - Chicago, IL: Precast panel corbel investigation, repair, and load testing
- Talcott Resurrection Parking Garage - Chicago, IL: Load testing of column corbels

Repair and Rehabilitation Design

- Ohio History Center - Columbus: Investigation of bridge structure and facade
- Beverly Wilshire Hotel - Beverly Hills, CA: Concrete balcony and railing repairs
- Mitchell Park Horticultural Conservatory - Milwaukee, WI: Evaluation of structural precast concrete dome frame
- Promontory Apartments - Chicago, IL: Exterior facade repair on historic Mies Van der Rohe high-rise
- Commonwealth Plaza - Chicago, IL: Plaza and terrazzo repairs on Mies Van der Rohe-designed high-rise building
- Sitka Sound Science Center - Sitka, AK: Restoration design of historic concrete facade
- Old Chicago Post Office - IL: Structural concrete and plaza repairs

Structural Evaluation and Analysis

- Aloha Stadium - Honolulu, HI: Seismic and wind analysis
- Chatham Tower - Miami Beach, FL: Finite element analysis and strengthening
- Four Winds Casino Parking Garage - New Buffalo, MI: Shear collar repair on column caps
- NASA, Vehicle Assembly Building - Titusville, FL: Investigation of metal and fiberglass sandwich facade panels
- AMC Theatres - Canada: Investigation, analysis, and repair of cracked precast sandwich wall panels
- Rachid Karami International Fairgrounds - Tripoli, Lebanon: Investigation of concrete grand arch