



# Professional Profile

**Michael F. Wiscons, SE, PE**  
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Mike Wiscons is Principal – Structural Engineering at Building Technology Consultants, Inc.



## REGISTRATIONS

- Licensed Structural Engineer (**SE**), Illinois
- Licensed Professional Engineer (**PE**), Illinois, Wisconsin, Minnesota
- Certified Construction Specifier (**CCS**)
- Certified Construction Contract Administrator (**CCCA**)
- Construction Documents Technologist (**CDT**)

## PROFESSIONAL EXPERIENCE

Prior to joining Building Technology Consultants, Inc. in 2014, Mike Wiscons was employed by Inspec, Inc. in Chicago, Illinois from 2007 to 2014, Hutter Trankina Engineering in Wayne, Illinois from 1998 to 2007, Larson Engineering of Illinois in Naperville, Illinois from 1993 to 1998, Charles E. Pease Associates in Park Ridge, Illinois from 1987 to 1993, and Sargent and Lundy Engineers in Chicago, Illinois from 1983 to 1987.

His professional experience includes:

- **Facade** evaluations;
- **Structural** condition **assessments**;
- **Forensic** investigations;
- **Structural analysis**;
- Project management;
- Repair **design** and preparation of **contract documents**;
- Construction **contract administration**; and
- Construction **observations**

Mike Wiscons has managed over 300 structural and building facade projects. These projects have included **steel, concrete, masonry, and timber** building systems on institutional, governmental, industrial, historic, commercial, and residential buildings, as well as parking garages and waste water treatment facilities.

## EDUCATION

Mike Wiscons earned his **Bachelor of Science** degree in Civil Engineering from the **University of Illinois** at Urbana-Champaign in 1982. He earned a **Master of Science** degree in Civil Engineering from the **University of Illinois** at Urbana-Champaign in 1983.

Since his graduation, he has attended numerous seminars and symposia related to exterior wall technology and structural restoration.

## PROFESSIONAL ACTIVITIES

- Member of International Concrete Repair Institute (**ICRI**)
- Member of Structural Engineers Association of Illinois (**SEAOI**)
- Associate Member of American Society of Civil Engineers (**ASCE**)
- Member of Building Enclosure Council – Chicago (**BEC**)

## PUBLICATIONS

- Wiscons, M., Farahmandpour, K., and Seegebrecht, G. "**Key Design Considerations for Concrete Topping Slabs in Split-Slab Construction**" Interface, November/December 2021
- Wiscons, M. and May, J. "**Fall Arrest Anchorage: The Right Testing Procedure for Your Project**" Interface, August 2016
- Wiscons, M. and Kilpatrick, D. "**Repair of Above-Roofline Parapet Walls on Vintage Structures**" Interface, March 2012
- Wiscons, M. "**Take Good Care of Building Facades**" Buildings Magazine, February 1, 2010

## REPRESENTATIVE PROJECTS

### 1620 South Michigan Avenue Condominiums – Chicago, IL

Responsible for construction documents, bidding assistance, and construction phase services associated with **exterior facade** and **balcony repairs** for a 12-story tall, post-tensioned concrete frame building. Restoration of deteriorated areas of concrete was included in repairs. Work incorporated elevated walkway slab reinforcement, identified during construction. Traffic-bearing membrane was replaced on all balconies prior to completion of work.

### AMLJ Deerfield Development – Deerfield, IL

Responsible for **building envelope** consulting services on new construction of a 4-story, 240-unit residential wood-framed building. Exterior wall finishes included **brick** with **cast stone** accents, and **fiber cement** siding and trim. Roofing system was revised from single-ply membrane to modified bitumen to accommodate winter construction. Work included peer review of material submittals, attendance at contractor coordination meetings, and periodic site visits to review construction.

### **St. Regis Condominiums Parking Garage** – Lombard, IL

Responsible for construction documents, bidding assistance, and construction phase services associated with **concrete repairs** and **waterproofing repairs** for a basement-level **parking garage**. On-going **water leakage** and **deterioration** of the concrete roof slab required removal of existing bituminous pavement at parking areas, and soil at landscaped areas. Concrete repairs included extensive top, underside, and full-depth repairs, including replacement of reinforcing steel. Waterproofing repairs included traffic bearing membrane (TBM) at parking areas, 2-ply modified bitumen waterproofing membrane at landscaped areas, and installation of new parking deck and green roof drains.

### **Malibu East Condominium** – Chicago, IL

Responsible for construction documents, bidding assistance, and construction phase services associated with **parking garage** repairs, and repairs to boat dock adjacent to Lake Michigan. Several different types of parking garage repairs were performed during the project including application of traffic bearing membrane, replacement of deficient **expansion joints**, and **concrete repairs**. Repairs to the boat dock were necessitated by ongoing outward movement of sheet piling along the lake. An innovative approach to provide lateral bracing of the sheet piling, using a structural slab that connected the top of the lake retaining wall to the building structure, was implemented.

### **St. Patrick Catholic Church** – St. Charles, IL

Responsible for evaluation, design, bidding assistance, and construction phase services associated with **repairs** to secure **limestone** accents over door and window openings at an elementary school. Initial construction of limestone veneer over masonry openings caused conditions where large pieces were loose and could be removed by hand. Work included removing loose limestone veneer, installing through-wall flashing, and securely anchoring the veneer to structure.

### **O'Donnell Parking Garage** – Milwaukee, WI

Responsible for the **failure investigation** and **structural analysis** of a 26,000-pound **precast concrete** panel which fell from a **parking garage**, causing serious injury and a fatality to pedestrians. The investigation involved field evaluation of the detached panel and the supporting **cast in place concrete** wall, coordination and review of testing laboratory petrographic analysis, review of original contract documents and shop drawings, and structural analysis of the as-built condition. Based on the results of the findings, all of the remaining precast concrete panels on the parking garage were removed due to safety concerns. Work was performed in support of litigation.

### **Milwaukee County Courthouse** – Milwaukee, WI

Responsible for the **investigation** and **repair** of a 10-inch diameter piece of **stone** facade which fell 7 stories from a courthouse building. Close-up examination of the failure identified that open copper seams in an integral gutter system within the cornice directly above caused trapped moisture to spall the stone due to freeze-thaw cycles. Repairs included a new replica piece of stone which was fabricated to bear onto solid stone that was epoxy anchored with **stainless steel** pins along with soldering of the deficient

copper seams. Due to concerns of the spalled stone, 100% hands-on examination of the remainder of the building was performed which identified other crack and spall deficiencies in need of repair.

#### **Conley and Mackeben Schools** – Algonquin, IL

Responsible for the **design**, construction **contract administration**, and construction **observations** of multiple phases of through wall **flashing** replacement. Two mirror image elementary schools experienced excessive **water leakage** at exterior walls throughout the buildings after most every rainfall since their original construction. Investigation identified several systemic deficiencies in the masonry cavity wall through-wall flashing, most notably improper adhesion and the lack of end dams. Repairs included removal of the exterior veneer in order to remove and replace the inadequate flashing with new flexible flashing and properly installed end dams. Due to the extent of the required repairs, work was performed on the buildings over the course of 3 summers, when school was out of session.

#### **North Shop Roof Truss** – Milwaukee, WI

Responsible for the **structural assessment** and **repair design** of a damaged 70-foot long **steel** roof truss caused by a collision with the open dump box of a salt truck. Work included an emergency site visit to review existing conditions and discuss temporary stabilization of the truss with a shoring contractor.

Responsible for the preparation of construction documents for repair of the damaged truss, review of vendor shop drawings, and construction **observations** to verify that the repairs were performed properly.

#### **Ecumenical Institute/ICA Building** – Chicago, IL

Responsible for the **facade examination** and follow up report on this 90-foot tall building in accordance with the City of Chicago Facade Ordinance. The facade consisted primarily of **brick** and **terra cotta**. Work also included a subsequent hands-on investigation of a damaged terra cotta unit and the corroded steel support structure. Recommendations for repairs were provided to the client.

#### **Bridgewater Lofts** – Minneapolis, MN

Responsible for the **investigation** of spalled **granite** panel cladding at multiple locations on a 10-story residential condominium building. Work included review of original construction documents and fabricator's shop drawings along with a site visit to observe invasive **exploratory openings** of the panels. Based on the investigation, granite deterioration was due to moisture that had infiltrated gaps at the grouted anchor connections on the edges of the panels, causing crescent shaped spalling due to freeze-thaw cycles. Recommendations were made to remove the panels due to possible safety concerns.

#### **University of Chicago** – Chicago, IL

Responsible for the facade **restoration** of numerous vintage buildings on campus. Work included surveys and evaluations of various **limestone** structures, preparation of construction documents, interviews with prospective contractors, construction **contract**

**administration**, and construction **observations**. Representative buildings included Burton Judson Hall, Foster Hall, Ida Noyes Hall, Blaine Hall, Belfield Hall, Ryerson Laboratory, Jones Laboratory, Sunny Gymnasium, Stuart Hall, and Swift Hall.

**Fox Valley Technical College** – Appleton, WI

Responsible for the **investigation** and preparation of construction documents for the replacement of the exterior insulation and finish system (**EIFS**) on the Sustainable Technology Center. The original barrier EIFS system on the building was deteriorated and allowed moisture to infiltrate into the building. Work included design of a new EIFS system with drainage and **flashing** to allow for moisture to freely escape from the facade.

**Northeastern Illinois University** – Chicago, IL

Responsible for the **investigation, design**, and preparation of construction documents for the replacement of a 220-foot long sloped **skylight** and its **supporting structure** that ran the length of the main circulation corridor of the Physical Education Building. The original skylight had deflected from its initial position. Investigation revealed an inadequate **wood** stud knee wall support and sloped brackets which induced lateral forces due to gravity loads. Work included the design of new horizontal brackets and a rigidly connected **steel** knee wall.