



Professional Profile

Joshua P. Wolf, EIT

ASSOCIATE ENGINEERING CONSULTANT

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REGISTRATIONS

- Enrolled Professional Engineer Intern (EIT)

PROFESSIONAL EXPERIENCE

Josh Wolf has been involved with the evaluation, testing, and repair of building envelope components since the spring of 2019.

In 2018, prior to becoming an Associate Engineering Consultant with Building Technology Consultants, Inc. (BTC), Josh had also worked for BTC as an Engineering Intern.

His professional experience includes:

- Destructive and nondestructive **testing**;
- Investigation of **water leakage** issues;
- **Forensic investigation** of **building facades** and **roofs**;
- Assisting in **structural design** for building components;
- Construction **contract administration**;
- Assisting in **capital asset studies** (Reserve studies); and
- Assisting in **structural** condition **assessments**.

EDUCATION

Josh Wolf earned his **Bachelor of Science** degree in **Civil Engineering** with an emphasis in Structural Engineering from the **Illinois Institute of Technology** (IIT) in Chicago in 2019. He also completed several Masters-level courses in the fields of Building Enclosure Design and Rehabilitation, and Structural Engineering while at IIT.

During his formal education, Josh attended several seminars related to civil engineering and structural engineering.



AWARDS

- CAC-**Building Envelope Foundation (CAC-BEF) Scholarship**, Chicago, IIT, 2018
- Society of **American Military Engineers** Bronze Medal, Chicago, IIT, 2017

REPRESENTATIVE PROJECTS

FedEx Forum – Memphis, Tennessee

Responsible for assisting in the **evaluation** of reported **water leakage** at this 150,000 square-foot basketball arena **dome roof**.

Several nondestructive test methods were performed to evaluate the condition of the roof. Test procedures included a **visual review**, **high voltage leak detection**, **aerial infrared thermography**, and **microscopic examination** of roof membrane samples. BTC's investigation revealed several deficiencies in the roof assembly leading to water leakage such as breaches through the roof membrane, significant linear craze cracking, and tears through the membrane. Design documents prepared by BTC included a new system with a fully-adhered thermoplastic membrane.

Heatherfield Condominiums – Glenview, Illinois

Responsible for design, bidding, and construction phase services for **facade and balcony repairs** at two 3-story residential buildings constructed in the late 1990s. The building facades primarily consist of **brick masonry** with **cast stone cladding** below 1st floor windows. Each unit has a **steel-framed balcony** with a concrete finished floor and steel handrails. Design included sealant repairs at windows and dissimilar materials, brick masonry and cast stone **repointing** and **replacement**, recoating steel members, and **traffic bearing membrane** application at concrete balconies.

3950 North Lakeshore Drive – Chicago, Illinois

Responsible for design, bidding, and construction phase services for **facade repairs** at three **23-story** residential buildings connected by a 1st floor lobby and parking structure constructed in the mid-1960s. The buildings' facades are primarily brick masonry with both punched and **strip windows**. Roof overhangs consist of exposed concrete. Design included brick masonry repointing and replacement, exposed **concrete patch repairs**, miscellaneous sealant repairs, **shelf angle** and **lintel repairs**, and localized penthouse repairs.

The 20 East Cedar Condominium Building – Chicago, Illinois

Responsible for design phase services and bidding assistance for **facade repairs** at this **vintage** 20-story condominium building. Design included removing and resetting of loose brick and **terra cotta** units, masonry tuckpointing, comprehensive sealant repairs, and shelf angle and lintel repairs. Design also included through-wall flashing repairs at **bay window roofs**.

Embassy Suites Hotel – New Orleans, Louisiana

Responsible for **evaluation** of reported **water leakage** through the walls and ceilings of guest **suites** and **ballrooms** within the **16-story hotel**. The building's facade is constructed of **concrete masonry units** with **sloped roofs** that drain into internal gutters or directly out of through-wall scuppers. Several investigative techniques were used to evaluate the source of water leakage including **hydrostatic** water testing, calibrated **spray nozzle** water testing in general accordance with **AAMA 501.2**, calibrated **spray rack** water testing in general accordance with ASTM E 1105, and **pressure chamber** tests in general accordance with ASTM C1601.

Capital Asset Studies (Reserve Studies) – Chicago Area, Illinois

Responsible for assisting in developing capital asset programs to map anticipated expenditures for the next 20 years. Building and site components were reviewed during field assessments to identify deficiencies that could result in increased maintenance. Representative projects included the following:

- **Batavia Public Library** (Batavia) – 54,000 square foot library built in 2001
- **The Waterford** (Chicago) – 26-story, 252-unit condominium building built in 1973