

**Almir Maksumic, CIT, CCSMTT, CDT**  
**ENGINEERING TECHNICIAN**  
amaksumic@btc.expert



## REGISTRATIONS

- Construction Document Technologist (**CDT**)
- American Concrete Institute (**ACI**) Certified Concrete Field Testing Technician - Grade 1
- Certified Level I Infrared Thermographer (**CIT**), with Roof Specifics, conforming to the guidelines of American Society of Nondestructive Testing
- International Concrete Repair Institute Certified Concrete Slab Moisture Testing Technician(**CCSMTT**) , Grade 1

## PROFESSIONAL EXPERIENCE

Almir Maksumic has been involved in assisting in the evaluation, testing, and repair of construction defects throughout his career.

Prior to joining Building Technology Consultants, PC in 2012, he was a Senior Technician with Universal Construction Testing in Wheeling, Illinois from 2007 to 2012, and a Nondestructive Expert Technician with CTLGroup in Skokie, Illinois from 1996 to 2007.

His professional experience includes

- Assistance in investigation of deterioration, **water leakage** issues, and construction deficiencies in **building envelopes** and **parking garages**;
- Assistance in repair design and preparation of **contract documents**;
- Nondestructive testing, including **impulse radar**, **impulse response**, **ultrasonic pulse velocity**, **half-cell potential**, **impact-echo**, **infrared thermography**, and **high and low voltage leak detection**.

## EDUCATION

Almir Maksumic earned a **Certificate of Computer Aided Design and Drafting** from **Zarem/Golde Ort Technical Institute** in Skokie, Illinois, in 1995. He has continued his studies in pursuit of an associate degree and had completed numerous courses associated with nondestructive testing and **construction troubleshooting**, including:

- Ultrasonic Testing
- Impulse Radar Testing (**Ground Penetrating Radar**)
- Impulse Response Testing

## REPRESENTATIVE PROJECTS

### Consolidated School District 158 (CSD 158) – Algonquin, Illinois

Responsible for assisting in **evaluation** of **water leakage** and **analysis** of several **construction** and **design defects** in this newly constructed school. Persistent water leakage continued to occur at a few locations at Conley Elementary School following completion of through-flashing (TWF) repairs. **Water testing** was performed in general accordance with **AAMA 501.2**, at roof flashing at the base of HVAC equipment curbs and associated HVAC units. Other water testing included **masonry drainage cavity testing** at 5 locations on the exterior masonry walls to evaluate the performance of the existing through-wall flashing.

### Dearborn Elm Condominium Association – Chicago, Illinois

Responsible for assistance in **evaluation** of **water leakage** and **analysis** of several **deficiencies** in this 17-story residential building constructed in 2001.

Work included performing **water testing** in general accordance with ASTM E 1105, Procedure B on doors and windows using a **calibrated spray rack**. **Operational force testing of sliding windows** was performed in several units. Testing was performed in general accordance with ASTM E 2068 - Standard Test Methods for Determination of Opening Force of Sliding Windows and Doors.

### Morton Arboretum – Lisle, Illinois

Responsible for assistance in **evaluation** of **water leakage** and **analysis** of several **deficiencies** in the administration building, library building, and original mansion.

Services included performing a **visual review** of the masonry and stucco exterior walls. Locations and **pattern of cracking** and **deterioration** were documented. **Water testing** was also performed to evaluate sources of interior water leakage. Water testing of masonry walls and skylights were performed in general accordance with **ASTM E 1105** (Standard Test Method for Field Determination of Water Penetration of Installed Exterior Windows, Skylights, Doors and Curtain Walls), and **AAMA 501.2** calibrated spray nozzle testing. **Hydrostatic flood testing** was used to evaluate sources of interior water leakage through roof membranes. **Exploratory openings** were made through the masonry to evaluate the condition of inner masonry wythes, and quality of prior repointing work.

### Unity Temple – Oak Park, Illinois

Responsible for assistance in **evaluation** and **analysis** of several **construction defects** in the **concrete walls** and **cantilevered slab soffits**. Worked closely with the structural engineer on preparing the **construction documentation**.

Unity Temple is acknowledged as the icon of 20<sup>th</sup> century architecture. Unity Temple was constructed in 1909 and it is the only surviving public structure from Wright's prolific Prairie Period.

### Memphis Airport Parking Garage – Memphis, Tennessee

Responsible for assistance in **evaluation** and **nondestructive testing (NDT)** of a concrete overlay repairs made at this 871-space, 3-story parking garage. NDT methods were used to evaluate **bond strength** between the overlay and existing structural slab. Using the Dyna pull-off test system, the bond strength of newly placed concrete overlay was accurately evaluated.

### Four Seasons Hotel and Resort – Vail, Colorado

Responsible for assistance in **evaluation** and **nondestructive testing (NDT)** of **concrete floors** within this 500,000 square foot resort. NDT methods were used to evaluate several **construction defects** in concrete slabs and beams. Impulse radar was used to evaluate the presence of shear studs around the building columns within the concrete slab. All column-to-slab connections were evaluated throughout the building.

### DeKalb County Water Filter Plant – Atlanta, Georgia

Responsible for assistance in **evaluation** and **nondestructive (NDT)** testing of concrete dividing walls within 300-foot long domestic water tanks. **Impulse radar** was used to evaluate the location of reinforcing steel and cover over that steel.

### Wards Island WPCP – Wards Island, New York

Responsible for assistance in **evaluation** and **nondestructive testing (NDT)** of concrete waste water holding tanks. **Impulse radar** and **impulse response** were used to evaluate the presence of honeycombing behind reinforcing bars within concrete walls and slabs. **Half-call potential** was used to evaluate the likelihood of corrosion of the embedded reinforcing steel.