Clement "Mik" Mikulich, P.E., F.P.E., CEM, CxA, LEED AP BD+C

CM Associates Engineers, PLLC - Principal

Mik is the owner and Principal at CM Associates Engineers. He has been responsible for large, small and diverse projects ranging from Municipal Facilities, Aviation, Commercial, Industrial, Educational Facilities, Resort and Healthcare. Mik has experience with HVAC systems, EMCS controls systems, domestic water heating systems, solar water heating, medical gas distribution systems, fire protection systems, and fire alarm systems. He also has experience in monitoring and analyzing system operations and uses his knowledge as a Professional Engineer and Certified Energy Manager to suggest ways to operate HVAC and electrical systems in the most energy efficient manner. Mik is also a Fire Protection Engineer and a LEED Accredited Professional.

Professional Licensing
Mechanical Engineer #42007
Fire Protection Engineer #58046

Professional Affiliations
- ASHRAE - Member, past Tucson Chapter President
- Association of Energy Engineers (AEE) – Member, Certified Energy Manager (CEM)
- AABC Commissioning Group (ACG) – Member, Certified Commissioning Authority (CxA)
- Building Commissioning Association (BCA) – Member
- USGBC – LEED Accredited Professional, Green Building Design + Construction
- National Fire Protection Association (NFPA) – Member
- Society of Fire Protection Engineers (SFPE) – Affiliate Member

Education
University of Arizona
B.S. Mechanical Engineering, 2000

Additional Training / Certifications
- LEED-NC: Technical Review Workshop, Phoenix, AZ
- HAP for LEED Certification Training, Tolleson, AZ
- Trane Air Conditioning Clinics, Tempe, AZ
- Electric Motor Controls, PCC, Tucson, AZ
- Bell & Gossett Advanced Pump Design School, Morton Grove, Illinois
- BeaconMedaes Medical Gas and Vacuum Systems Training, Phoenix, AZ
- HTP Solar Thermal Training, Tucson, AZ
- SFPE Fire Protection Engineering PE Exam Online Prep Course

Project Experience Summary

Green Valley Hospital; Green Valley, Arizona
The new 148,000 sq. ft. hospital included operating rooms, emergency department, radiology department, pharmacy, administration offices, 200 in-patent beds, and a cafeteria. Mik provided whole-building commissioning services and wrote all commissioning documents including Prefunctional Checklists, Functional Performance Test procedures, the Commissioning Report, and the Systems Manual to meet Green Globes requirements.

El Rio Community Health Center Congress Street Redevelopment; Tucson, Arizona
Mik designed the HVAC, plumbing and fire protection systems, including LEED documentation, Energy Modeling, and Fundamental Commissioning. This new construction, two story 50,000 sq. ft. medical office building includes a same-day clinic, midwifery, dental exam rooms, pharmacy, and small restaurant.

Tucson International Airport Cooling Tower Replacement; Tucson, Arizona
Mik developed schematic phasing plans to establish the most effective replacement plan. He removed the existing cooling towers and sweeper separator systems and piping modifications for the replacement towers. He modified the electrical feeders and circuiting to connect the replacement towers and condenser water controls to handle the replacement towers.

Other Experience Includes

Desert Diamond Casino - Sahuarita, Arizona
Indian Health Care Center Building; Winslow, Arizona
JW Marriott Tucson Starr Pass Resort; Tucson, Arizona
Papago Park Readiness Center; Phoenix, Arizona
TIA Chiller Replacement; Tucson, Arizona
TIA Concourse Renovations; Tucson, Arizona
CNG Central Plant Upgrade; Tucson, Arizona
HUMINT General Instructional Building; Ft. Huachuca, Arizona

Compressed Natural Gas (CNG) Central Plant Upgrade
Included a new CNG compression plant, new CNG storage, new fast fill dispensers, and a new time fill system; streamlining vehicle fueling capability, optimizes daily pull-out and pull-in operations, and brings the CNG fueling systems up to current industry vehicle fueling standards. Services included programming, schematic design, and design development, construction documents, construction administration, and commissioning.

DEMA Sensitive Compartmented Information Facility
The SCIF at the Papago Park Military Reservation Headquarters building in Phoenix, is a high security space. Non-metallic flex connections were required where the piping and ductwork cross the walls and ceilings.

Tucson International Airport (TIA) Chiller Replacement; Tucson, Arizona
For this project under our on call mechanical engineering contract, Mik was the prime consultant, mechanical engineer of record, and commissioning provider to replace one of the three chillers at the Tucson International Airport and remove the fourth existing chiller. Designed the HVAC and controls, provided construction administration services, and commissioned the controls. Mik wrote Functional Performance Test procedures and witnessed the testing to ensure that the chiller controls operated in accordance with the design intent.

Tucson International Airport (TIA) Concourse Renovations
Mik was the mechanical engineer for this 70,000 square foot remodel of the A and B Concourses at TIA including interior finishes, ceilings, restrooms, food and concession venue shells, and security checkpoints. The existing primary/secondary chilled water system was upgraded to a primary/variable flow system, and one of the four existing chillers was replaced. Mik designed the HVAC, plumbing, and controls systems and provided construction administration services.