



DAVID TYRRELL, P.E., CxA

ADAMS AND ASSOCIATES ENGINEERS, PLLC - PRINCIPAL ENGINEER

Dave is a Principal Engineer and specializes in large scale, complex projects utilizing his skills in mechanical engineering with Commissioning knowledge to add value to the project team. His design experience includes projects from all over the southwest; he is registered as a mechanical engineer in Arizona, California, Nevada, New Mexico, and Texas. Dave is also a Certified Commissioning Authority (CxA). Dave has experience with HVAC systems, EMCS controls systems, lighting and daylighting controls, emergency generators, domestic water heating systems, photovoltaic systems, solar water heating, fire protection systems, fire alarm systems and electrical power distribution.

Professional Licensing

Mechanical Engineer

Arizona Registration #45700

California Registration #35956

Nevada Registration #022055

New Mexico Registration #20776

Texas Registration #124637

Professional Affiliations

- ASHRAE - Member, Past Membership Promotion Chairman, Tucson Chapter
- AABC Commissioning Group (ACG) – Member, Certified Commissioning Authority (CxA) #406-140

Education

University of Arizona

B.S. Mechanical Engineering, 2002

- LEED-NC: Technical Review Workshop, Tucson, AZ
- HAP for LEED 2009 BD&C EA1, Tucson, AZ
- Trane Air Conditioning Clinics, Tucson, AZ
- AABC Commissioning Group Total Building Commissioning Conference, Chicago
- Bell & Gossett Advanced Pump Design School, Morton Grove, Illinois
- University of Titus, Consulting Engineer Seminar, Richardson, TX
- Mitsubishi Electric Diamond Designer Sem., Tucson, AZ

Selected Project Experience

One E. Broadway, Tucson, Arizona

The building is a 136,000 sq. ft. mixed use building with four levels of parking, one partial level of retail, two levels of Office and two floors of residential apartments. The retail and commercial occupancies were provided with variable refrigerant volume air conditioning systems that combine several indoor fan coil units with a single outdoor condensing unit.

Tucson City Courts Chiller Replacement

This project involved the replacement of the two water-cooled chillers, cooling towers and upgrading the existing mechanical room with a refrigerant management system and exhaust system. The chilled water system was converted from constant flow primary/secondary loops to primary-variable flow.

UA Tech Park Building 9024 Heating Hot Water Boiler Upgrade; Tucson, Arizona

The firm has been working with Tech Parks Arizona as a mechanical prime to decentralize the aging and deteriorating heating water system. Building 9024 is heated through two 1.6 MBtuh Camus Dynaforce heating water boilers sized at approximately 80% of the estimated building heating load for redundancy. The heating water system is a constant flow primary, variable flow secondary decoupled through a Caleffi hydro-separator that incorporates a de-coupler and air/dirt separator functions.

Other Experience Includes

Sahuarita Municipal Complex; Sahuarita, Arizona

Oro Valley Aquatic Center; Oro Valley, Arizona

Avent/Kimberly Clark Clean Production Area Expansion

Securaplane Production Facility

Ritz Carlton Resort at Dove Mountain; Marana, Arizona

DMAFB HVAC Replacement; Tucson, Arizona

Maricopa Regional Health Clinic; Maricopa, AZ