
ALISON HALL, PE/FPE



Title: Principal Mechanical and Fire Protection Engineer, LEED AP BD+C, CPD

Education: Bachelor of Science ➤ Master of Science ➤ Mechanical Engineering
➤ University of Nevada, Reno.

Licenses: **Professional Mechanical Engineer**, Nevada: # 021194, California: # M36909, Texas: # 121301, Arizona: # 68221, Utah: # 11136957-2202, Oregon: # 94338PE, New Mexico: # 25454, **Professional Fire Protection Engineer**, Nevada: # 021194

Professional Affiliations: American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), American Society of Plumbing Engineers (ASPE), Society of Fire Protection Engineers (SFPE)

Experience & Qualifications: Alison has over 15 years of experience in HVAC and Plumbing design, Geothermal Exchange design, and building energy modeling. Alison has been a Principal of the firm since 2018.

Alison also has experience in the area of energy analysis and measurement and verification of high-efficiency equipment performance as well as continuing education with AutoCAD MEP and Revit software, and building energy modeling.

As a design engineer, Alison has performed thorough energy analyses on buildings of various sizes using energy analysis software including Carrier HAP, Energy Pro, Energy Plus, and DOE-2's eQUEST.

Alison is responsible for HVAC and plumbing system design and oversight, geothermal exchange design, building energy modeling, report writing, specification writing and construction administration.

DBE/SBE/WBE Certificate No. NV20934569NUCP

ALISON HAS OVER
15 YEARS OF
EXPERIENCE IN
HVAC, PLUMBING,
GEOTHERMAL
EXCHANGE DESIGN
AND BUILDING
ENERGY
MODELING.

PROJECTS:

UNIVERSITY OF NEVADA, RENO
UNIVERSITY ARTS BUILDING

WASHOE COUNTY SCHOOL
DISTRICT
WILDCREEK HIGH SCHOOL

UNIVERSITY OF NEVADA, RENO
PALMER ENGINEERING
RENOVATION

Alison was the Lead Mechanical Engineer working under **DLR Group** for a new Fine Arts Building on the UNR Campus. The building features a **287-seat recital hall, practice rooms**, electroacoustic lab, soundproof isolation rooms, green room, and a recording studio; all with **strict sound criteria for HVAC design**. The recital hall is served by a **displacement ventilation system serving slightly warmer temperature air at a very low velocity from diffusers located under the seats**. This building has very stringent acoustic requirements which were all met or exceeded with our HVAC design.

Alison was the Lead Mechanical Engineer for this new 280,000 square foot, three-story building which provides a state-of-the-art education space with capacity for 2,200+ students and includes 40 general learning rooms, 11 science laboratories, 15 shared group rooms, 17 specialized laboratories for art, media, and career tech, a **425-seat performing arts center**, and two gymnasiums. The mechanical system consists of six 6-pipe water-to-water heat pumps that provide heating hot water and chilled water to 11 custom air handlers. The heat pumps accept/reject heat from/to a ground loop bore field with 384 holes at 380 feet deep.

Alison was the Lead Mechanical Engineer for a **complete renovation of the historic Palmer Engineering building**, which was **originally constructed in 1941**. A new four-pipe fan coil system was designed for this building to provide the new laboratory and classroom spaces individual temperature control that they did not previously have. **Palmer Engineering is included as a historic structure in the University Historic District**. The University's Facilities Services and **Design Team worked with the Nevada State Historic Preservation Office on this project in order to keep standards for the treatment of this historic property**.

Ainsworth Associates Mechanical Engineers
