



Title: Mechanical Designer

Education: Senior at the University of Nevada, Reno studying Mechanical Engineering.

Experience & Qualifications: Before joining AAME, Jacob worked through several engineering internships gaining valuable work experience in drafting and manufacturing.

In his position at Ainsworth Associates Mechanical Engineers, Jacob performs several tasks in the scope of mechanical and plumbing design, including Building Information Modeling (BIM), duct design, pipe sizing, and performing computer generated heating load calculations. Jacob has become proficient with the myriad software used by the firm including Autodesk's Revit and AutoCAD, Carrier HAP, and Microsoft Office.

Jacob's education includes courses in thermal sciences which include heat transfer, thermodynamics, and fluid mechanics. Jacob's curriculum has also included courses in mechanical design and the computer-aided design process.

JACOB HAS
EXPERIENCE IN
HVAC AND
PLUMBING DESIGN
AND LOAD
CALCULATIONS.

PROJECTS:

MOANA SPRINGS COMMUNITY POOL

Jacob has the opportunity of being one of the designers assisting with the design of the Moana Springs Community Pool HVAC and plumbing systems. Jacob is aiding in the sizing and layout of the ductwork and piping for the building. This project is a new build, and the scope involves adding a large dehumidifier, several unit heaters, air conditioners, and all associated ductwork and hydronic piping involved.

LYON COUNTY SCHOOL DISTRICT RESTROOM IMPROVEMENTS

Jacob was part of the team that helped design restroom renovations for twelve schools spread around the Lyon County School District. The scope of this project involved replacing old plumbing fixtures with new fixtures and their associated plumbing componentry. Jacob also assisted with design for renovating the existing ductwork as needed to accommodate the improvements. The project was fully designed using the collaborative process of BIM.

NEVADA DEPARTMENT OF WILDLIFE TENANT IMPROVEMENT

Jacob was one of the lead designers for a tenant improvement project for the Nevada Department of Wildlife Call Center. The project was a complete renovation of the existing call center including new ductwork, diffusers, domestic-water piping, and plumbing fixtures. The project also included adding small instantaneous water heaters to individual plumbing fixtures to ensure properly heated water due to a lack of a circulation pump in the existing system.