

HVAC Engineer

Education

- BS in Mechanical Engineering or practical working experience in the HVAC design field

Experience

- Minimum 3-5 years' experience in the HVAC design field or practical construction experience in HVAC projects
- Plumbing design experience desirable but not required
- AutoCAD and BIM experience desirable but not required

Salary

- Negotiable and commensurate with practical HVAC design experience

Responsibilities

The applicant must have the ability to communicate with clients to identify their needs and work with them to find solutions and generate the design and calculations necessary to implement the agreed upon solutions. The successful applicant should be able to direct drafting personal and be able to create construction document packages utilizing AutoCAD or BIM.

The ability to work in a project team environment as well as direct the work of others is necessary. Successful applicant must be able to demonstrate experience and/or skills in the following areas:

- Detailed load estimating utilizing computer software simulation. Includes knowledge of building construction materials, knowledge of meeting outdoor air requirements for indoor air quality, and general understanding of internal heat loads (ie lights, computers, equipment, etc.)
- Application and selection of various types of HVAC equipment including air handling units, fans, coils, condensing units, and furnaces.
- Design and layout of commercial and industrial duct systems including supply, return, exhaust, ventilation, and dust collection systems.
- Application and selection of air terminal devices such as variable air volume boxes, grilles and diffusers, and louvers.
- Design, application, and selection of hydronic systems and steam/condensate systems including chillers, boilers, cooling towers, pumps, and associated system accessories.
- General knowledge of HVAC system controls desirable. Includes development of general HVAC temperature control diagrams and written sequences of operation.
- General knowledge of plumbing design would be beneficial but not required. Would include general knowledge of the plumbing code and specific requirements for sanitary sewer and vent piping design, storm sewer piping design, and domestic hot and cold water piping design.
- Development of construction document packages based on the project requirements and application. This shall include project coordination with other disciplines (structural, architectural, electrical), directing drafting personnel, and checking project construction documents.
- Writing job specific equipment and materials specifications.
- Attending and conducting client meetings in order to clearly understand job/owner requirements and expectations. Includes, project review meetings, construction meetings, and project closeout meetings.
- Project shop drawing and submittal review.
- On-site inspections of HVAC system installations.