



SENIOR PROJECT ENGINEER (HVAC-R) JOB DESCRIPTION

Company Profile: National Design Build Services is a mechanical design/build firm that offers our customers knowledge and experience in designing air conditioning, heating, ventilation and refrigeration systems (HVAC/R) for commercial, industrial and healthcare buildings. NDBS focuses on Leadership in Energy and Environmental Design (LEED) as it applies to mechanical systems and whole building systems integration. Our projects consist of Medical/Surgery Centers, Warehouses, Office Buildings, Manufacturing Facilities, Food Processing Plants, and Refrigerated Warehouses. NDBS offers impressive benefits and compensation program in addition to excellent career development opportunities. We have an immediate opening at our office in St. Peters, MO for an experienced mechanical engineer. Position will eventually move to our future location in Westport.

Position Summary: The Sr. Mechanical Engineer at NDBS is involved in all aspects of the HVAC design / build process. From project conception through the details of design and field coordination, you will work with our staff of experts sharing practical knowledge and experience unmatched in this industry. Examples of HVAC installations range from commercial building “packaged system” to complex central mechanical systems. This position is responsible for delivering project design assignments within time and budget parameters while satisfying client contracts.

Essential Duties and Responsibilities: To perform this job successfully, an individual must be able to perform the following satisfactorily; other duties may be assigned.

- Design and plan layouts of equipment, duct, and piping systems.
- Drive the development of HVAC design from initial concept through construction drawing.
- Application engineering including but not limited to Sequence of operations, load calculations, psychometrics, refrigeration, acoustics, and temperature control systems.
- Engages in several levels of field engineering, assisting with project execution, trade coordination, scheduling, document management and commissioning.
- Prepare project estimates for design, equipment, installation, labor, materials, and other related costs.
- Review and approve contractor bids, RFI's, submittals, and change requests.
- Responsible for developing and refinement of department means and methods including specifications and details.
- Responsible for development and implementation of department policies and procedures.
- Accountability for project engineering design time and associated costs.
- Responsible for overview of system design that meets or exceeds the budget set forth by project estimate.
- Responsible for development of young engineers through one-on-one and group training.
- Support sales, project managers, and service department for all engineering related issues from project inception through closeout and warranty.
- Preconstruction services and project planning
- Conceptual design through construction drawing development
- Economic & energy analysis
- Load calculations, design and layout of equipment, duct and piping systems

- Applications engineering including psychometrics, refrigeration, acoustics, and controls systems
- Coordination of design and installation with Project Management, Construction and Service departments

Requirements:

- P.E. License
- Must have 10+ years of HVAC Mechanical Engineering Design experience working for a mechanical engineering consultant or HVAC design/build contracting firm.
- Proficiency in HVAC and Refrigeration Mechanical design fundamentals and systems applications
- Proficiency with building codes
- Proficiency in load calculations, system design, equipment/ductwork/piping layout and coordination with other building trades.
- Proficiency in AutoCAD (or similar drafting software), building load and energy code compliance calculations (Trane Trace, etc.)
- Ability to interact effectively with others in a team environment
- Excellent leadership skills
- Excellent organizational and time management skills
- Excellent oral and written communication skills
- Self-starter and strong desire to succeed

Competencies: To perform the job successfully, an individual should demonstrate the following.

Communications - Exhibits good listening and comprehension. Expresses ideas and thoughts in written form. Expresses ideas and thoughts verbally. Keeps others adequately informed. Selects and uses appropriate communication methods.

Continuous Learning - Assesses own strengths and weaknesses. Pursues training and development opportunities. Seeks feedback to improve performance. Shares expertise with others. Strives to continuously build knowledge and skills.

Initiative – Volunteers readily. Undertakes self-development activities. Seeks increased responsibilities. Takes independent actions and calculated risks. Looks for and takes advantages of opportunities. Asks for help when needed.

Problem Solving - Develops alternative solutions. Gathers and analyzes information skillfully. Identifies problems in a timely manner. Resolves problems in early stages. Works well in group problem solving situations.

Teamwork - Balances team and individual responsibilities. Contributes to building a positive team spirit. Exhibits objectivity and openness to others' views. Gives and welcomes feedback. Puts success of team above own interests.

Education/Experience:

Bachelor's degree from four-year college or university; or one to two years related experience and/or training; or equivalent combination of education and experience.

Must have a minimum of 10+ years of HVAC Mechanical Engineering Design experience working for a mechanical consulting firm or a design build contractor.

Demonstrated experience showing proficiency in conducting load calculations, systems design, layouts, and trade coordination is a must.

Computer Skills:

Microsoft Office Suite: Word, Excel, Access, and PowerPoint. Proficiency in Revit/AutoCAD, load

calculations, & Energy code compliance calculation software (Trace 700, ComCheck, etc.). Proficient in HVAC Mechanical design fundamentals and systems applications.

ACKNOWLEDGED: Employee Signature

Date

PRINT: Employee Name

ACKNOWLEDGED: Supervisor/Manager Signature

Date