



Energy Engineer

Reports To: Director of Energy Solutions

Primary Purpose:

The Energy Engineer supports the Energy Solutions team in analyzing energy efficiency in new building construction and in executing energy audits, HVAC system assessments and retro-commissioning for existing buildings. Position will include a combination of analytical work and field testing. Engineer will also support the engineering services team in performing preliminary HVAC systems analysis and design and providing technical support for operations activities. Tasks will be performed under supervision of Energy Solutions and Engineering managers.

Principal Duties and Accountabilities:

- Perform energy engineering of mechanical systems for new building construction, including energy modeling and economic analysis of competing mechanical systems.
- Perform field activities within existing buildings including onsite HVAC system assessments, energy audits, and retro-commissioning tasks.
- Conduct project site surveys to verify existing conditions of architectural, mechanical, plumbing, and/or electrical systems.
- Perform data input, utility rate analysis, and evaluation of energy conservation measures.
- Perform preliminary design reviews of mechanical or electrical systems supporting HVAC, central plant and building automation systems.
- Perform design tasks and calculations under the direction of Project Managers, such as: duct layout, piping layout, heating and cooling load calculations, plumbing system layout, and equipment selection.
- Generate preliminary mechanical system design narratives.
- Assist with preparing test procedures for mechanical system operation.
- Create written progress reports that thoroughly describe findings and recommendations.

Education, work experience and/or training typically possessed by qualified candidate:

Education:

- Bachelor's of Science Degree in Mechanical, Architectural Engineering or similar discipline required.
- Successful completion of the Fundamentals of Engineering (FE) exam is strongly recommended.

Experience:

- 1-3 years work experience in energy modeling, energy auditing, and design.
- Experience with building energy modeling software such as eQuest, Energy Plus, or other DOE approved software is required.

Knowledge, skills, and abilities typically needed for competent performance:

- Proficient in computer skills utilizing current Windows operating systems and software.
- Experience with spreadsheets, data entry, formulas, and data manipulation.
- Experience with HVAC systems including cooling, heating, and air distribution systems.
- Experience with basic HVAC design including basic psychrometrics and heat transfer concepts.

- Proficient speaking and writing skills for report writing and presentation to clients.
- Strong analytical skills.
- Keen attention to detail.
- Able to manage time effectively and meet deadlines.
- Ability to be flexible, adapting to changing or competing priorities.
- Ability to work in a variety of team environments, from office professionals to field personnel.

Physical and/or travel demands:

- Able to conduct on-site surveys in variety of building types accessing rooftop units, mechanical rooms, and basement equipment, or equipment located on building grounds outdoors.
- Minimal travel may be required, although the majority of projects will be located in the region.

To Apply: Interested parties should apply on-line at our website:

<http://www.usengineering.com/careers/open-positions>