

Mechanical Designer

Job Titles

- Mechanical Designer I
- Mechanical Designer II
- Mechanical Designer III

Reports to

- Vice President of Mechanical Engineering and Mechanical Engineers

Position Overview

- Under the direction of the Mechanical Engineer and Project Manager, the Mechanical designer applies Mechanical theory to design and specify mechanical systems, performs load estimate and energy usage calculations, completes energy code compliance documentation, participates in coordination meetings with design team members and clients, corresponds with vendors and contractors, performs site surveys, observes construction projects, and reviews submittals.

Duties and Responsibilities

- Knowledgeable of or actively learning various HVAC systems and RE Dimond specifications.
- Coordinate clearances and fit for all MEPT systems.
- Calculate HVAC load estimates for various spaces, building, and processes.
- Conduct site surveys.
- Prepare construction cost estimates.
- Design air distribution and hydronic systems under supervision of Mechanical Engineer.
 - Ductwork design, layout, and sizing.
 - Grille, registers, and diffuser selections.
 - Central air handling unit, and terminal unit selections.
 - Piping design, layout, and sizing.
 - Central plant and equipment selections.
 - Central air handling unit, and terminal unit selections.
- Design of automation control systems.
- Proficient or actively learning REVIT.

Qualifications

- Mechanical Designer I:
 - Four-year degree in engineering or technology related subject area and 5 years verifiable work experience, or
 - Two-year degree in engineering or technology related subject area and 10 years verifiable work experience.
- Mechanical Designer II:
 - Four-year degree in engineering or technology related subject area and 10 years verifiable work experience, or
 - Two-year degree in engineering or technology related subject area and 20 years verifiable work experience.

Working Conditions

- Generally, work is in a typical office environment.
- Travel to client meetings sometimes required.
- Travel to project sites and the ability to document existing conditions is required.
- Travel to construction sites and the ability to observe and document construction progress is required.
- Compliance with client and job site superintendent safety protocol is required.
 - Hard hats, safety toe shoes, hi-visibility vest, ear and eye protection are sometimes required to be used.
- Some evening and weekend work is required.
- Occasional overnight travel is required.

Direct Reports

- Production

Area: Engineering

Specific Area: Mechanical Operations

Topic: Job Descriptions

Issue: Job Description

Detail: Mechanical Designer

Originator: M East

Date: 09/28/2021

Supersedes (date): None-Original
Issue

Changes are in RED

Approved By: Leadership Team