



Position Results Description

Structural Project Engineer

Industrialized Construction Solutions Inc. (ICS) is a pioneer and industry leader in the design, prefabrication, delivery and management of national building portfolios using advanced Industrialized Construction methods. We are currently seeking candidates for the position of Structural Project Engineer to carry out the development, design, engineering and delivery of high-performance component buildings.

Position Summary

This position is responsible for project and product structural engineering, construction administration and supporting design and research for the structural systems utilized in ICS prefabricated construction activities. Structural implementation challenges that the position entails will touch many areas of ICS's unique delivery model including but not limited to R&D, design, sourcing, scheduling, manufacturing, logistics, and ease and speed of installation. This is a pivotal position that will require innovative design skills and a keen sense of technical detail coupled with strong communication skills.

Job Responsibilities

- Perform structural analysis and design calculations for structural building systems to be delivered leveraging industrialized construction methodologies.
- Work with in-house Structural Engineering and Architecture team on the design, development, digital twin modeling, documentation, permitting, manufacturing and construction administration of innovative structural building systems and components to be utilized in prefabricated componentized construction.
- Conduct structural engineering quality control to ensure all product development and project deployments are upheld to ICS engineering standards and the requirements of applicable building codes.
- Conduct engineering studies, prepare and present reports to clients investigating alternative design approaches for maximum manufacturing and build efficiency.
- Work with cross-disciplinary design/AE, supply chain, logistics and construction teams to develop building systems and component designs encompassing best-in-class design for manufacturability and assembly (DFMA) techniques in support of cost effective and high quality structural component factory assembly and onsite installation.
- Work with Supply Chain to identify efficient structural component sources of supply:
 - Evaluate structural component & material sourcing logistics.
 - Help develop and design, in conjunction with the suppliers, ICS's components around optimal fabrication processes and procedures.
- Effectively interact with cross-functional teams to identify opportunities to improve structural component field installation reliability and efficiency.



- Provide support to Installation team in developing cost estimates and anticipated schedules by component for all structural trade related activities required to complete installation.
- Help develop and design, in conjunction with the Supply Chain team and ICS's partner manufacturers, building systems and components around minimizing total cost to manufacture.
- Help develop and design, in conjunction with the Installation team and ICS's partner installers, building systems and components around minimizing installation schedules and costs.
- Assist in organization and coordination of component shop/production drawings and trade installation drawings.
- Monitor, track, and support construction administration activities.
- Continually monitor effectiveness of existing structural systems and components while helping to define requirements for new products.
- Work with the Product team in the production of Revit-based construction and production documents, details, and automated workflows.
- Work with cross-functional teams and software engineers to develop and implement efficient and automated workflows throughout the design to construction project phases.

Specific Skills and Experience Requirements

- Requires 8-10 years of structural engineering/design experience including experience on structural wood, hot-rolled steel, and light gauge steel project(s).
- Proficient knowledge of hot/cold steel & wood structural systems. Basic knowledge of concrete structural systems.
- Proficient understanding of the International Building Code as it relates to construction of project.
- Requires Bachelor's Degree in Civil/Structural Engineering.
- Requires a Professional Engineer (PE) license in Civil or Structural Engineering in at least one US State.
- Proficiency in Revit required.
- Proficiency in any major structural engineering finite element analysis software required; proficiency in RISA-3D and Enercalc preferred.
- Experience in FrameCAD and MWF softwares preferred but not required.
- Must possess strengths in verbal and written communications; ability to adapt communications/presentations and deliver clear and concise reports and analysis to senior management, clients, and industry partners.
- Requires ability to meet deadlines and work in a fast-paced environment.
- Requires the ability to be self-motivated, work independently with minimal supervision, and manage a staff of 2-3 Structural and Architectural Designers on task-based work.
- Requires high degree of ethics and integrity.
- Requires occasional travel within the US.



Benefits and Compensation

- Salary is competitive and based upon relevant experience
- Substantially subsidized medical, dental, and vision insurance provided
- Paid holidays, PTO, and sick leave
- Engineering license maintenance fees fully subsidized
- Location preference is local to our Bentonville AR or San Francisco CA teams, however remote applicants near a major US airport will be considered
- US work visa sponsorship available

About ICS

Headquartered in Bentonville, AR, and with offices in San Francisco, CA, ICS has been revolutionizing the building industry since 2006 by applying technology and process to overcome the inefficiencies inherent to traditional construction. Originally formed as Project Frog and restructured to ICS in 2023, ICS is more than just a forward-thinking company. We are a team using each other's strengths and knowledge as resources to create bright, inspiring and efficient buildings and processes that are specifically designed to overcome labor and supply chain challenges plaguing the AEC industry. We are award-winning business professionals, researchers, architects, engineers, product designers and inventors as well as accomplished entrepreneurs and innovative builders who are looking for bright people to join our team. Our culture is collaborative, fun and results-focused while encouraging open exchanges of new ideas and innovation. For more information, visit www.ics-build.com.

Application Instructions

To apply for this position, please send us a cover letter and your resume to info@ics-build.com, with the job title, Structural Project Engineer, noted in the Subject field. Applicants must meet the above-mentioned qualifications. Due to the high volume of applications received, we are unable to comment on the status of an individual application. Your application will be reviewed and you will be contacted if you are chosen to move forward in our hiring process.