



JOB DESCRIPTION

STRUCTURAL ENGINEER, JUNIOR/INTERMEDIATE

As the Structural Engineer, Junior/Intermediate, you will be responsible for the structural design of residential and small commercial buildings and conduct field reviews and investigations, preparing drawings, writing reports and ensure all work meets the highest quality standards.

Key Responsibilities

- Structural design of residential and small commercial buildings for new construction, renovations and additions.
- Structural design of special (non-building) structures (e.g., bridges, towers, government/military infrastructure), often includes monitoring, testing, and follow-up evaluation and certifications.
- Field investigations at building sites to assess structural failures and determine design solutions for remediation, often related to insurance claims.
- Performance evaluation of the strength attachment for seismic and wind pressure restraint of building components such as claddings, guard rails, mechanical and electrical equipment.
- Coordination of laboratory testing programs, witnessing of tests, and analysis of test data for pre-engineered design of construction details for industry use in future building project designs.
- Research, preparation, and publishing of code evaluation compliance reports and engineering design technical guides for building products.
- Working under the direction of senior engineers on tasks relating to those technical items.
- Specialized training to strengthen skillset, such as structural design and drafting courses through colleges or industry associations.
- Focus is made on developing “hands-on” engineering skills. Primary duties are:
 - Preparing structural drawings in CAD software and by hand drafting.
 - Performing field reviews at construction sites of design projects while under construction to verify accuracy to design specifications.
 - Structural calculations evaluating strength and deflection of components such as beams, columns, connections, shear walls, diaphragms, foundations.
 - Writing reports of field inspections results.
 - Quality Control activities such as writing work procedures, checklists, documentation and file organization, project list and schedule updates.

QUALIFICATIONS

- Bachelor of Engineering degree (Masters encouraged) from an accredited University in Civil-Structural discipline.
- Registered, or eligible to register, as an engineer-in-training (EIT) or Professional Engineer (P.Eng.) with Engineers and Geoscientists BC. The successful candidate will be directly supervised by a professional engineer (P.Eng.) registered in BC.



- 2 – 5 years of professional experience in a consulting environment working with Canadian and USA building codes and materials design standards.
- Hands-on work experience in a construction-related setting with structural materials and tools (e.g. labour and trades work, landscaping, fabrication shop).
- Trained and experienced using AutoCAD, Bluebeam, MS Word, MS Excel software.
- Valid B.C. driver's license and personal vehicle available for business use.
- Commitment to client service, technical excellence, teamwork, and career-personal growth.

Company Overview

BOCA Engineering Co. SPAR is a locally owned and operated structural engineering company headquartered in Victoria, BC, serving the Vancouver-Island based construction industry and consulting on building with new innovation construction methods across Canada and USA. BOCA-SPAR provides services that include structural building designs for new construction and renovation, product code evaluations, laboratory testing programs, remediation assessments/solutions, and specialty (non-building) structure designs.

We believe in developing leaders from the ground up, starting with hands-on technical operations, leading to project and client management, and then guided growth to the aspired seniority level. Team members are able to rotate through several roles in their interest areas, keeping work fresh and exciting while expanding skills and knowledge. We are committed to enabling team members to reach their career aspirations and beyond in a positive culture of partnering, mentorship and respect.