

Project Engineer– Building Envelope

March 2024

Adjeleian Allen Rubeli Limited (AAR) is a highly respected building engineering firm and has led the Ottawa market since its inception in 1955. AAR provides a comprehensive range of services in all areas of building structural and building science engineering for both new and existing structures in the National Capital Region, and Greater Toronto Area, along with other areas of Canada, including Northern Canada and Eastern Canada. The Ottawa office counts nearly 40 staff, providing a close-knit group with a large experience and knowledge pool. AAR offers a welcoming and constructive team atmosphere, focused on our five corporate values: Fairness, Trust, Adaptability, Ownership, and Transparency.

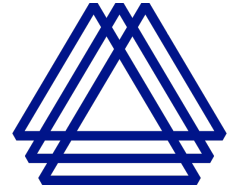
The Position

As a Building Envelope Project Engineer, with a University Degree in Engineering and eligibility to obtain a professional engineering designation, you will be responsible for leading and managing project delivery, primarily in the Building Envelope Team at AAR. The position reports to the Building Envelope Team Leader, and you will work closely with several engineers within the firm. As a Building Envelope Engineer, you'll play a crucial role in ensuring the durability, performance, and sustainability of building exteriors and assemblies. You'll work closely with architects, contractors, and other engineering teams to optimize building designs and materials, enhancing the overall building performance, and prevent unwanted material and assembly failures.

The Project Engineer will be expected to work from the office and on construction sites. AAR provides a flexible work environment with remote work capacity for all staff. The Project Engineer would be expected to work in the Ottawa office a minimum of 2 days per week on average, depending on work priorities and assigned tasks.

As a Building Envelope Project Engineer, you will participate in and manage a variety of engineering functions related to the services we provide for investigations, assessments, design, construction review, building retrofits, and building repairs. Your work will be completed in close collaboration with other senior engineers, and within a team of peers. In addition, junior staff will report to you on some projects. Tasks include:

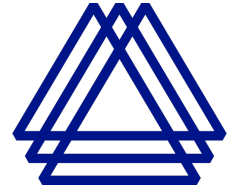
- Manage projects with regards to workload and delivery, financials (fee proposals and invoicing), and staffing.
- Provide input and assist the Building Envelope Team Leader with regards to overall team strategy, growth, and staffing.
- Building condition assessments and surveys. Gather information from existing drawings, site surveys, and exploratory openings and prepare reports, including detailed analyses and recommendations.
- Forensic investigations into cladding, roofing, and waterproofing material, and system failures. Diagnose problems and failures within the assemblies and provide clear and concise recommended repair options.
- Design and assist in the preparation of detailed drawings, sketches, specifications, and scopes of work for rehabilitation and repair projects for cladding, roofing, and waterproofing assemblies.
- Provide full-service project management services for building cladding restoration and repair projects.



- Provide onsite quality assurance field reviews to ensure that the installation of building envelope components aligns with the approved designs and specifications, maintaining high-quality standards throughout the construction process.
- Perform contract administration on rehabilitation projects including maintaining detailed records of design changes, specifications, test results, and project progress. Prepare comprehensive reports and presentations for stakeholders as required.
- Performance Testing and Evaluation, including various tests, such as air and water infiltration tests, to assess the performance of the building envelope and recommend improvements based on results.
- Work closely with architects, engineers, and contractors to integrate building envelope and structural systems seamlessly into the overall building design and construction process for a variety of rehabilitation projects.
- Work closely with building owners and property managers to act as a technical advisor, providing guidance and recommendations regarding building envelope design, materials, and performance.
- Perform infrared thermographic hygrothermal analysis of building claddings and envelopes to determine areas of heat loss, moisture ingress, or other deficiencies within the cladding assemblies.

This position requires;

- Highly adaptable and flexible personality, able to balance competing priorities and to deliver expected results on time. Our working environment is supportive but highly dynamic with changing priorities and exposure to varying project types and engineering problems;
- An individual who has 2-7 years of building science engineering work experience;
- Ability to complete work autonomously as well as within a supportive team;
- Professional Engineer designation in Ontario is mandatory. Holder of a OIQ seal is an asset;
- Good communication skills and interpersonal skills, able to clearly communicate with colleagues, collaborators and client / stakeholders;
- High problem solving capacity;
- Understanding of all construction disciplines and general construction practices, as well as, knowledge of codes, acts and regulations pertaining to Building Envelope engineering;
- Knowledge of Microsoft Word and Microsoft Excel, AutoCAD and other related computer software systems;
- Ability to understand and interpret architectural and engineering drawings;
- Professional ethical approach and demeanor;
- Security clearance of all employees is required to operate the firm. All new employees are required to work towards obtaining a Personnel Security Clearance (PSC) level of Secret Level 2 with the Canadian Industrial Security Directorate (CISD). It is expected shortly after starting employment with AAR that the new employee will obtain a PSC level of Reliability. Security screenings may utilize law enforcement inquiries with mandatory electronic fingerprint requirements. Credit checks may also be included in the screening. Depending on the project, employees may eventually be required to obtain a security clearance level over and above Secret Level 2 which may require a personnel interview with CISD or another security branch of the government, which may also involve a polygraph exam;
- Knowledge of analysis softwares such as Wufi, FlirTools, and Therm will be considered an asset but is not necessary;



- Bilingual (French / English) abilities will be considered an asset but is not necessary;
- Access to a vehicle for site visits and meetings is required. Related expenses such as mileage and parking are reimbursed by the firm.

Start date: Negotiable, asap.

AAR offers the following general compensation package for the above role:

- Yearly salary between \$77,000 - \$105,000 depending on experience level and skill set.
- Vacation credit of 10 days per year, or 15 days per year for an individual with more than 3 years of comparable experience.
- Group insurance coverage for medical, dental, life insurance and long and short-term disability. Membership commences after 3 months of full-time employment. Individual costs for each plan member are shared equally by the employee and the firm.
- Group pension plan membership is offered after 3 months of full-time employment. The firm contributes an amount equal to the employee member's contribution to the plan up to 5%.

AAR is an employee-owned company. In addition to the above, shares may be offered to staff, based on years of service, level of work quality and effort.

AAR encourages all staff to continue learning. Financial support is made available for our staff to obtain Continued Education Credits (or similar) or other targeted training that will enhance the employee's skill set and meet PEO requirements.

AAR encourages all staff to enjoy social activities with their colleagues. In addition to yearly staff BBQ and Christmas parties, several social activities are organized for staff to enjoy. In 2023 this has included a HOPE volleyball team, participation to pub trivia night, staff lunches, team BBQs, Holiday party, hosting of a multi-firm softball tournament, a board game night, and more!

How to apply: send your resumé to careersottawa@aar.ca