

Winnipeg – Building Envelope Specialist

Description

We are seeking a skilled and experienced Building Envelope Specialist to join our multidisciplinary consulting engineering firm in our Winnipeg office. In this role, you will focus on building envelope diagnostics, investigation, and performance evaluation for a variety of commercial, institutional, and residential projects.

As a Building Envelope Specialist, you will investigate envelope-related deficiencies such as water infiltration, air leakage, condensation, thermal bridging, and other performance issues. You will provide clear, technically sound findings and practical recommendations based on field observations, testing, building science principles, and applicable codes and standards. You will work collaboratively with architects, engineers, building owners, contractors, and other stakeholders to identify root causes and develop appropriate remediation strategies, ensuring our clients receive reliable, evidence-based guidance.

Responsibilities

KEY DUTIES & RESPONSIBILITIES

- **Project Management:** Lead the end-to-end delivery of building envelope investigation projects, including defining scope with clients, developing budgets and schedules, coordinating site activities with clients and sub-consultants, and ensuring timely delivery of findings and recommendations.
- **Envelope Diagnostics & Investigation:** Lead technical investigations of reported building envelope issues, including water intrusion, air leakage, interior and exterior condensation, thermal performance concerns, and component failures involving façades, roofs, windows, wall assemblies, and building joints.
- **Field Testing & Inspection:** Plan and conduct on-site diagnostic assessments using methods such as infrared thermography, blower-door and air-leakage testing, moisture mapping, humidity measurement, and visual inspection.
- **Root-Cause Analysis:** Identify the underlying causes of observed failures using principles of building science, building physics, hygrothermal behavior, and construction practice.
- **Reporting & Recommendations:** Prepare clear, defensible technical reports documenting observed conditions, investigation and testing methodologies, results, root-cause conclusions, and recommended remediation strategies.
- **Codes & Standards:** Apply knowledge of Canadian building codes and applicable CSA, ASTM, AAMA, and other industry standards to support investigations, findings, and recommendations.
- **Collaboration:** Work closely with architects, engineers, building owners, contractors, and other stakeholders to establish investigation requirements and communicate technical findings clearly and professionally.
- **Continuing Education:** Stay current with building envelope technologies, diagnostic techniques, testing standards, construction practices, and new materials and systems affecting envelope performance.

POSITION REQUIREMENT

- Minimum of 5 years of relevant professional experience in building envelope performance, diagnostics, investigations, or a related technical field.
- Project management experience, including managing budgets, schedules, technical investigations, and client communications.
- Experience conducting field investigations and using diagnostic tools and techniques such as infrared thermography, blower-door or air-leakage testing, and moisture or humidity measurement.
- Strong knowledge of Canadian building envelope performance requirements,

Hiring organization

Tower Engineering Group

Employment Type

Full-time

Beginning of employment

As soon as possible

Duration of employment

Full-Time

Industry

Consulting Engineers

Job Location

1140 Waverley Street, R3T 0P4,
Winnipeg, Manitoba, Canada

Working Hours

Monday – Friday 37.5hrs

Base Salary

\$ 65000 - \$ 90000

Date posted

September 8, 2026

Valid through

30.09.2026

building science principles, and relevant industry standards.

- Strong understanding of moisture management, air and vapour control, thermal performance, and condensation within building assemblies.
- Excellent written communication skills, with the ability to prepare clear and technically defensible reports for architects, engineers, building owners, and other stakeholders.
- Ability to work independently while contributing effectively within a multidisciplinary consulting team.
- Commitment to workplace safety and ethical professional practice.

Qualifications

- Experience with construction defect investigations, forensic building assessments, or warranty-related investigations.
- Familiarity with hygrothermal and thermal modelling tools
- Knowledge of cold-climate building envelope design and performance challenges, including condensation, thermal bridging, air leakage, and moisture management.
- Experience developing or supporting building envelope remediation strategies in collaboration with architects and engineers.
- Relevant professional designation, certification, or technical training related to building science, thermography, air-leakage testing, engineering, architecture, or construction is considered an asset.

Job Benefits

- Competitive salary commensurate with experience.
- Comprehensive benefits, including extended health, dental, and vision coverage.
- Group RRSP plan with employer matching.
- Professional development support for technical training, conferences, certifications, and continuing education.
- Opportunities to work on a diverse range of building investigation and remediation projects.
- A collaborative multidisciplinary environment with a strong emphasis on technical rigor, practical solutions, and honest, defensible reporting.

Contacts

Please submit your resume and cover letter to John Shotton, Human Resources, at jshotton@towereng.ca. Your cover letter should outline how your experience and qualifications align with the requirements of the position.

We thank all applicants for their interest; however, only those selected for an interview will be contacted.