

2021-10-27

JR. ENGINEER: EMBEDDED CARBON AND ENERGY MODELING

Heritage Standing Inc. (HSI) is an engineering firm dedicated to old buildings. We are based in Fredericton, New Brunswick, Canada. As specialists in structural and conservation-based engineering, we solve complicated technical problems by using specialized knowledge, research level technologies, and international best practices. We reduce the embodied carbon output of the construction industry by helping owners maintain, rehabilitate, and reuse their historic buildings and structures. “The greenest building is one that already exists.”

Unfortunately, our historic building assets are negatively impacted by society’s focus on operational energy use. Energy modeling software provides few (if any) options for historic building envelope assemblies. Assemblies must be painstakingly recreated with diverse research level data sets. And historic buildings’ contributions to reducing embodied carbon, because they have already been built and have longer life spans than contemporary buildings, are ignored.

We are currently seeking a technically oriented candidate to join our small dynamic team. The new position will evaluate and model the sustainability benefits of historic buildings and will allow owners to objectively quantify the carbon reduction benefit of maintaining or reusing their historic building. This will ensure historic building owners, including governments, institutions, not-for-profits, and homeowners, will be able to positively contribute to national carbon emission targets. While we have identified a set of candidate requirements, we are open to exploring unique combinations of skills that complement our services in an unconventional way.

The successful candidate will:

- Evaluate embedded carbon for various existing buildings
- Create energy models for existing buildings
- Evaluate the sustainability of existing buildings and building envelopes
- Design potential rehabilitation for existing building envelopes
- Understand national and international conservation approaches

Employees at Heritage Standing enjoy making a positive impact on communities and climate change. Our benefits include flexible work hours, work from home options, and supportive co-workers who quickly become friends. We also provide 10% time to full-time employees for a research project of their choosing related to building conservation.

The successful candidate will understand why existing and historic buildings are important in fighting climate change. Applications must demonstrate attention to detail, strong writing skills, adaptability with new software, work efficiency, and analytical skills. Technical ability, curiosity, integrity, and commitment to community are the foundations of our work. Applications must state your willingness and ability to work in Canada.

ESSENTIAL SKILLS

<i>Energy modeling (using E-Quest or similar software)</i>
<i>Technical writing experience</i>
<i>Problem solving skills</i>
<i>Attention to detail</i>
<i>An understanding of how buildings are designed and built</i>

ASSETS

<i>Conservation education and experience</i>
<i>Registration, or the ability to become registered, as a Member in Training or Professional Engineer with the Association of Professional Engineers and Geoscientists of New Brunswick</i>
<i>Bilingualism</i>
<i>Experience working with old buildings</i>

QUALIFICATIONS

<i>Degree in engineering OR another technical credential that would allow you to fulfill the described role</i>
<i>Valid driver's license</i>

Interested candidates please submit a cover letter, detailed CV, and a one-page sample of your writing to hr@heritagestanding.ca. As cultural sensitivity is an important aspect of conservation work, please include the indigenous name of the river that flows through Fredericton, NB, in your cover letter. Review of applications will begin Nov. 5, 2021 and continue until the position has been filled.

Thank you for your interest. Please contact us if you have any questions.