

Brunch and Learn Technical Seminar

Friday, May 22nd 2026

9:00 AM to 12:00 PM

Sala San Marco 215 Preston Street

Modeling Carbon and Controlling Heat Loss

From Detailed Design to Practical Insights

As the building industry faces increasing pressure to reduce emissions, improve performance, and deliver durable, resilient buildings, the way we design and evaluate our projects is evolving rapidly. Regulators, owners, and the public are placing greater expectations on designers and builders to demonstrate outcomes—not just intentions—across energy performance, carbon impact, and long-term building quality. Meeting these expectations requires moving beyond rules-of-thumb and embracing more rigorous, integrated approaches that connect design decisions to measurable results.

At the same time, there is growing recognition that early design choices, detailing quality, and the reliability of technical inputs can have outsized impacts on a building's lifetime performance. From material selection to enclosure detailing, small gaps in coordination or understanding can undermine efficiency targets, increase operational costs, and create durability risks—particularly in Canada's demanding climate. As codes, standards, and performance targets continue to tighten, these issues are no longer optional considerations but core competencies for today's practitioners.

This brunch and learn brings together building scientists, architects, engineers, suppliers, and builders to explore how the industry can better align design intent, technical execution, and performance outcomes. By focusing on practical challenges faced in real projects, the session highlights the importance of robust workflows, clear quality control, and performance-informed decision-making as essential tools for delivering the next generation of high-performance, low-impact buildings.

Session #1: Bridging BIM and LCA: Improving Model Readiness for Embodied Greenhouse Gas Assessment

As the construction industry moves toward decarbonization, Life Cycle Assessment (LCA) is rapidly shifting from an emerging practice to a near-future necessity. While still in its early stages of adoption, LCA is increasingly expected to inform design decisions and support embodied carbon reduction targets. However, most BIM models used in practice, particularly at permit and construction documentation stages, are not structured to support reliable LCA, limiting their effectiveness in real projects.

This presentation examines the practical gap between BIM and LCA, referencing frameworks such as ISO 14040 and ISO 14025, and why current workflows fall short. Drawing on industry case studies, the session introduces a structured quality control approach to improve BIM model readiness, addressing common issues such as missing elements, inconsistent materials, and data misalignment.

Attendees will gain practical insight into how to better prepare BIM models for LCA and support more reliable embodied greenhouse gas assessments in practice.