



**Dr. Randy Van Straaten**

## Employment History

Dr. Randy Van Straaten is the President and a Building Science Specialist at Building Enclosure Labs Inc (BELi) in London Ontario. Previously, Randy worked as RDH Building Science with roles including managing their life cycle analysis services. Randy has recently been lecturing on the topics of sustainability including embodied carbon of whole buildings and for products. Since opening his own firm he has been focused on providing life cycle analysis for the building industry.

## Education & Teaching

Sessional Professor (current)

- Building Science for Retrofits - George Brown College
  - Building Performance - Ryerson University
- Ph.D., Civil and Environmental Engineering, Western University, London, ON
- Coordinated and taught within the Our Green Campus facility management program at Western University.
  - Western Facility Management Sustainability Specialist and Building Science Support

M.A.Sc., Building Engineering, Civil Engineering Dept., University of Waterloo, ON

- Building science and materials science teaching assistant and lecturer

Sep 1995-Apr 2000: B.A.Sc., Mechanical Engineering, University of Waterloo, ON

## Memberships

- P.Eng., Professional Engineers of Ontario
- ASHRAE Member
- Passive House Canada member

## Life Cycle Analysis Projects

Embodied carbon and disaster resilience analysis for Spuzzum Community Building addition for their CaGBC Zero Carbon v2 Design certification and Green and Inclusive Community Building (GICB) grant

Low-Carbon Solutions for Multiunit Residential Buildings for BC Housing including overcladding a residential tower include measures to achieve net zero carbon performance.

Pembina Institute Reframed Lab Initiative aimed at scaling up deep retrofits. Randy is serving as the sustainability expert on a team designing for HVAC replacement and overcladding a Vancouver building.

Supporting development and optimization of a total building envelope system including walls and fenestration for FLYnn which is optimized for thermal performance, construction speed, wall thickness and embodied carbon.

Enbridge Savings-by-Design workshops for new and retrofit building projects including Museum London and RBC Place. Randy developed and presented building envelope upgrades solutions for these existing buildings.

BELi recently completed a costing study to upgrade the City of London's next new firehall to the high performance Passive House standard.

Conducted life cycle costing study of cladding options for mid- and high-rise MURB for EIFS Council of Canada including detailed thermal performance analysis.

Facilitated and/or been a subject matter expert for many Enbridge Savings-by-Design workshops for new and retrofit building projects focused on reducing operating carbon emissions and GICB grant targets.

Whole building embodied carbon analysis for CaGBC Zero Carbon v1 Design Certification for Mohawk College's Joyce Centre for Partnership & Innovation.