

Meeting Minutes

Building Research Committee (BRC)

April 22, 2026

Attendance

Alireza Asharioun	Dhairya Patel	Richard Kadulski
Brad Doff	Eric Wilson	Sherman Wai
Cooper Dawson	Fitsum Tariku	Theo Christiaanse
Darla Simpson	Grace Oh	Wilma Leung
David Bruce	Graeme Verhulst	Zhra Zenker
David Harlander	Nicolas Proulx-Jones	
Derek Budde	Phalguni Mukhopadhyaya (<i>Chair</i>)	

9:00 AM – Meeting Open

The Chair opened the meeting and thanked everyone for attending.

9:02 AM – Agenda Approved

9:03 AM - Presentation: The Blower Door Blueprint: Fundamentals, Standards and a Case Study in Whole Building Airtightness Testing

Presenter: *Sherman Wai, RDH Building Science*

Sherman Wai presented on the whole building airtightness testing methods and standards. The steps involved in testing of larger buildings was illustrated by a case study of BCIT Student Living Building. The design of the testing plan was based on review of mechanical and architectural plans. Measurements were performed with known issues such as a faulty window. Sherman provided numerous illustrative examples of temporary sealing methods to meet compliance. Followed by an analysis of the measurement data and impacts of wind on testing data.

The discussion by the group highlighted areas of concern such as PTACs and an opportunity to use compartmentalization as a pathway for compliance.

9:35 AM – Presentation: Thermal Envelope New Features: Extrapolating Data from Simulated Results and Other New Tools

Presenter: *Nicolas Proulx-Jones, Evoke Buildings Engineering Inc.*

Nicolas Proulx-Jones presented on the new updates to the thermal bridging guide website. This website provides a freely accessible database of envelope design elements with thermal transmission properties. A calculator tool enables a robust calculation of the envelope for an early-stage estimate. Two new ways to estimate hypothetical design elements transmission properties have been added. The Extrapolator enables a user to find database elements that are close to the desired solution and extrapolate new data from those database elements. The example was changing clip spacing. The Guestimator visualizes different design elements on a plot and the engineer can select on the graph a point. With the translation to French, an additional framing

factor calculation has also been introduced to align the compliance in Quebec. The process to upload new design elements is to reach out to Evoke with a request.

10:01 AM – Presentation: From Project to Practice: What Stuck After Charter Telecom

Presenter: *Graeme Verhulst, Graeme Verhulst Architect*

Graeme Verhulst presented on the design and construction of a Mass Timber Passive House Office building. The trades and builder had limited experience with passive house and mass timber. The key learnings on this project were to avoid complexity making it easier to build. The air barrier was moved toward the exterior. Clashes were avoided by ensuring sequencing and trade scope had less overlap. Communication on key decisions based on the thermal modelling were communicated to trades to prevent coordination issues. The discussion by the present members covered making high-performance buildings the default, creating owner-architect-contractor project buy-in, and getting early alignment. The value of higher performance may also not be appreciated by lenders, appraisers and owners. Thermal comfort was identified by the group as both a major selling point but also a risk for Passive house without cooling.

10:25 AM – Break (20 minutes)

10:45 AM – Presentation: Building a Foundation for Reconciliation: Lessons from Housing Projects in First Nations Communities

Presenter: *Eric Wilson, Read Jones Christoffersen Ltd. (RJC)*

Eric Wilson started off by explaining the unique site conditions of the Halalt First Nation. Unique conditions due to historical inequities from logging, sediment accumulation in the local river and the E&N railway held back water leading to a devastating flood destroying homes. Work that took place to co-design a home that considered the practical needs and unique values of the homeowners and their role in the community. The initial like-for-like replacement was not sufficient due to overcrowding and approval was obtained to build a larger home was place with an additional 400sqft. The high-performance homes that were delivered led to issues with humidity and mold due to the different lifestyle of the homeowners. The practise of checking in every week in the first three months, and every month for the first six months with adjustments were key solutions. Key cultural considerations were materials, dancing space, hosting areas, considerations for sightlines, sequestering due to the cultural role of the homeowner.

11:11 AM – Presentation: Best Practices in Building Systems (BPiBS)

Presenter: *Wilma Leung, BC Housing*

Wilma presented on a collaboration between BC Housing and UVic that seeks to accelerate sharing best practises by connecting fragmented practises, updating outdated approaches, and helping knowledge flow across sectors. The project seeks to create various tools through its living compendium. Which is a dynamic online digital space to share information.

The group discussion was prompted by Wilma to discuss where information gets stuck, what lessons we keep relearning, and what a shared resource could look like. One issue was raised that high-performance buildings may lead to humidity issues if not carefully monitored after delivery.

Alternative forms of air-barrier testing. And the use potentially of BIM to improve information flow on a project level.

11:35 PM – Forum Discussion

- The next meeting shall remain in Vancouver and in the morning based on a democratic vote.
- The DASH project has started 4 pilot projects which require Architects to use a standardized 4-7 storey wood frame residential building design. The program has numerous innovations such as BIM, Pre-fabrication, Mass Timber, and numerous software solutions aimed to speed up costing and design optimization of pre-fab. www.acceleratedhousing.ca
- ZEIC seeks to find methods of different pathways for compliance of airtightness to lower costs through compartmentalization, drones, and other technologies.
- The Retrofit Lab is engaging homeowners on cost escalation, creating a guide to improve decision making.
- SFU is creating a new building science and research group.
- Wilma Leung part of the BPiBS projects called for contributions to the living compendium, technical theme's or other can be shared with mbar@bchousing.org.
- Phalguni put out a call to the members to bring presentations for next time on how AI presents challenges and opportunities. "How is the industry dealing with AI?"

12:02 PM – Meeting Close and Networking