Meeting Notes
Building Research Council (BRC)

Wednesday April 18, 2018 8:30 a.m. to 12:00 p.m.

The Italian Cultural Centre Society

3075 Slocan Street

Vancouver, BC

In Attendance:

Denisa Ionescu, BC Housing (Chair)
Antje Wahl, Forestry Innovation Investment
Bill McEwen
Bill MacKinnon, BC Housing
Bob Sloat, Surety Association of Canada
Cindy Moran, BC Housing
Dave Fookes, Morrison Hershfield
David Bruce, Pacific Energy Innovation Association
Douglas Bennion, ICFMA
Elizabeth Tang, CMHC
Farshid Borjian, Masonry Institute of BC
Fred Tai, Simpson Strong Tie
Hamid Ghanbari
Helen Goodland, Brantwood Consulting
Jason Teetaert, SMT Research
Jieying Wang, FP Innovations
Joe Hoy, Williams Engineering
Laurence Matzek, RCABC
Les Yard, Dow Building Solutions
Lorne Ricketts, RDH Building Science
Mahtab Bodaghabadi, BC Housing
Matt Dalkie, Concrete BC
Patrick Shek, City of Burnaby
Paul Creighton, WSP
Peter Moonen, Wood-Works
Phalguni Mukhopadhyaya, University of Victoria
Ralph Moore, Aviva Canada
Richard Kadulski, Richard Kadulski Architect
Sonya Zeitler Fletcher, Forestry Innovation Investment
Terry Rudolph, Cascadia Inspection
Tom-Pierre Frappé-Sénéclauze, Pembina Institute
William Tran, SR Engineering

---

1. **Approval of the Agenda/ Additional Items**
   The meeting was called to order at 8:30 a.m. D. Ionescu welcomed everyone to the meeting on behalf of the BRC followed by a roundtable introduction. The meeting agenda was approved.

2. **Approval of November 1, 2017 Meeting Minutes**
   The minutes from the November 1, 2017 BRC meeting were approved.

3. **Affordable Housing Renewal Project**
   Tom-Pierre Frappé-Sénéclauze, Pembina Institute
   Tom-Pierre presented on the lessons learned from the Energiesprong model in Amsterdam, which allows aging buildings to receive a more rapid and cost-effective deep energy retrofit and seismic upgrade. This alternative approach reduces costs and significantly expedites home retrofits by leveraging an aggregated bidding process and by designing a retrofit solution that is easily replicated.

4. **R22+ Walls Testing Program**

   Jieying Wang, FP Innovations

   Jieying presented a study which aims to investigate options to achieving high R values efficiently and address concerns related to high R value wall assemblies. The study will monitor moisture performance under elevated indoor humidity and simulated water leaks and will record the assemblies' reduced drying capacity, susceptibility to interstitial moisture accumulation and their reduced tolerance to water leaks during construction/building service.

5. **Documentation of a Passive House, Six-Storey, Lean Project**

   Helen Goodland, Brantwood Consulting

   Helen presented on the Lean Project Delivery process, which challenges the principle that there is always a trade-off between time, cost, quality and safety. The production management-based delivery system, applies a holistic approach to integrate project stakeholders throughout the course of the project, from the design phase through project delivery. The Lean Project Delivery process, will be used to document the construction of an innovative high-performance wood-frame building, from the design stage to post occupancy, to investigate how it can lower project costs while achieving social and environmental goals more efficiently.

6. **Forum Discussion**

   - Lorne Ricketts mentioned RDH is collaborating to produce guides on R30+, low-slope vented-roofs, National Building Strategies and will be reviewing changes to the National Building Code and their implications to B.C.
   - Helen Goodland provided a summary of a study currently being conducted in collaboration with the Delphi Group, on the economic impact of the new Energy Step Code. The report will provide energy efficient design options and will highlight the potential benefits to suppliers that can produce these projects.
   - Wilma Leung mentioned various communities have provided feedback on the Energy Step Code. Also, a market response monitoring study is underway which will investigate solutions to mitigating the Energy Step Code and the impacts to supply chain.
   - Sonya Zeitler Fletcher highlighted the need for more research on mass timber construction, specifically moisture, fire safety and performance; and suggested to include comparisons between European mass timber construction and North American.
   - Peter Moonen, mentioned WoodWorks B.C. in collaboration with the Canadian Wood Council is working to increase assembly production and the number of prefabricated assemblies that meet Passive House standards.
   - Tom-Pierre Frappé-Sénéclauze, mentioned the province is revamping its climate leadership commitments and has released an open call for input on proposed provincial targets.
   - Ralph Moore, suggested more research is needed on the following topics waterproofing multi-family buildings, solutions to preventing water ingress in parkades, recommendations to repair water ingress in parkades and recommendations that designers should be providing construction teams to reduce potential construction errors.
   - Douglas Bennion provided an overview of an ICF study which is investigating the thermal performance of light frame assemblies and the effects of buffering over longer periods of time. The study will also provide a summary on ICF cavity walls.

- Les Yard mentioned the Dow and Dupont merger indicates more data and research will be made available to the public and the new company will have increased research capabilities.
- Jason Teetaert described a research study SMT is conducting on conventional roofing types, which will monitor the service life of different materials, and will investigate polyiso insulation to determine how much moisture gets trapped in during summer months. The final report will include the results of field research and research methodology.
- Jason Teetaert mentioned SMT has the largest collection of roofing data and are currently investigating methodologies to reduce the need to replace conventional roofing on regular basis.

7.0 Next BRC Meeting

Meeting Scheduled for November 7, 2018, 8:30 a.m. – 12:00 p.m.