

**MEETING NOTES**  
**Building Research Committee Meeting**  
 Wednesday, May 23, 2012, 8:30am to 12:00pm  
 Italian Cultural Centre  
 3075 Slocan Street, Vancouver

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**In Attendance:**

Bill McEwen	Masonry Institute of BC (Chair)	Jieying Wang	FPIInnovations – Forintek Division
Bob Thompson	Building and Safety Standards Branch	Jason Teetaert	SMT Research Ltd.
Denisa Ionescu	HPO	David Bruce	Ministry of Energy
Doris Deiter	HPO (recording)	Samer Daibess	JSD Building Engineering
Richard Kadulski	AIBC	Rodrigo Mora	BCIT
Chris Mattock	Habitat Design and Consulting	Christa Wilcock	Halsall Associates Ltd.
Richard Madden	Adera Development Corp	Robert Sloat	Surety Association of Canada
Brittany Hanam	RDH Building Engineering	Gordon Monk	BC Hydro Power Smart
Graham Finch	RDH Building Engineering	Dan Bradley	Terasen Gas
Douglas Watts	Read Jones Christoffersen	Ralph Moore	Travelers Guarantee
Patrick Roppel	Morrison Hershfield	Rick Alexander	WBI Home Warranty
Hamid Heidarali	Morrison Hershfield	Karen Liu	Xero Flor International
Allan Dobie	CHMC	Terry Adamson	Westeck Windows & Floors
Fred Tai	Simpson Strong-Tie	Patrick Shek	BOABC

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**1. Approval of the Agenda/Additional Items**

The meeting was called to order at 8:45 a.m. B. McEwen welcomed everyone to the meeting on behalf of BRC. The May 23, 2012 BRC meeting agenda was approved.

**2. Approval of November 30, 2011 Meeting Minutes**

The minutes from the November 30, 2011 BRC meeting were approved.

**3. Net Zero Retrofit**

B. Hanam presented a summary on the net zero retrofit project. The research report is complete and fact sheets are in progress for the interior and exterior retrofits of four archetype houses. The guidelines were developed based on a literature review and energy simulation studies. The report includes costing analysis.

**4. Review of the Window Energy Rating System**

A progress report on the window energy rating study was provided by B. Hanam. The study is based on whole building energy simulations including energy consumption and thermal comfort. Next steps include a review of thermal comfort, ER for doors and skylights and MURBS. The project is scheduled for completion in fall 2012.

## 5. **Log and Timber Homes**

G. Finch presented on the log and timber homes project. These homes do not meet building code energy requirements and the industry is looking at trade-offs. Next steps include measuring whole house air leakage, airtightness and water testing.

## 6. **CMHC Air Leakage Project in Multi-Unit Residential Buildings**

G. Finch provided an update on this study which is focusing on industry preparedness and quantification. Currently testing is required in areas such as Washington State and Seattle but not Canada. During the meeting it was discussed that Part 5 Building Code will not be addressing airtightness at this time.

## 7. **Ventilated Attics in Cool Marine Climates**

P. Roppel presented on the ventilated attics study which is currently underway.

## 8. **Field Monitoring and Vertical Movement in Wood Frame Buildings**

J. Wang provided an update on the causes of vertical movement including wood shrinkage, loading and key factors for reducing the movement. Vertical movement was monitored in two buildings over fourteen months.

## 9. **Current Research Projects**

D. Ionescu spoke about various research projects including:

- Seismic Illustrated Guide which is almost complete and should be vetted and posted on the HPO website within the next few months
- The Building Smart seminar series “2012 Code Changes – Safety, Efficiency and Sustainability” is underway
- Window and Door Retrofit Guidelines includes a publication for builders that will be posted online early fall and the consumer guide will be posted early 2013
- A bulletin on LEED Gold Building Design and associated costs
- Three Maintenance Matters videos for consumers are currently available on the HPO website. Topics include at-grade and below-grade assemblies, exposed wood structures and cladding
- Consumer Guidelines to Managing Renewals in MURBs in progress.

R. Mora provided an update on the feasibility study for the installation of a full-scale environmental test chamber for research purposes at BCIT. Moreover, he spoke about the Building Science Masters Graduate Research Program and future research and the BCIT School of Construction and the Environment (SOCE) Online Asbestos Course.

G. Finch provided information on a hands-on 12 week building envelope course at BCIT titled BLDC 3060.

## 10. Open Forum and Discussion – Issues Requiring Research Attention

G. Monk spoke to the BC Hydro project on effective thermal performance of assemblies specific to mid and high-rise buildings in BC. The project is in collaboration with many funding partners including HPO, FP Innovations, FortisBC, and others and will be completed late 2013.

D. Ionescu provided an update on a project producing a guideline document on heat recovery ventilators. The HPO is seeking funding partners for this project.

D. Ionescu spoke to two other proposals from the NSERC on high performance buildings. One project focuses on high performance windows and the other is a proposal to improve the accuracy on energy models (energy calculations, etc.). Both proposals are under consideration.

J. Wang provided an update on two projects including air efficiency guidelines for wood-frame buildings in cold and coastal climate currently underway and energy efficiency of net-zero housing.

B. Thompson provided an update on the upcoming 2012 BC Building Code. The material is at the printers right now – probably will be available at the later part of this year.

A. Dobie spoke to the EQUilibrium Forum October 2012. CMHC will bring four team projects to review and discuss four projects in detail.

J. Teetaert spoke about two NSERC projects on in situ heat measurements and moisture content for concrete structures.

D. Bruce noted that regarding window and door fenestration in cold climates there is a national condensation committee. They are looking at the use of surface coatings. There is concern that there will be an increase in condensation with the use of these coatings, particularly in colder climates since they will result in cooler surfaces.

D. Bruce informed that AIBC, APEG, GCABC, MEM– developing guidelines to help guide designers to scope and adopt code requirements on fenestration.

FPInnovations has done a study on the thermal performance of wood doors– hoping to have a presentation on this at the next BRC meeting in November.

## 11. Next BRC Meeting

Meeting scheduled for November 28, 2012.