

MEETING NOTES
Building Research Committee Meeting
 Wednesday, November 30, 2011, 8:30am to 12:00pm
 Holiday Inn Vancouver Centre
 711 West Broadway, Vancouver

In Attendance:

Bill McEwen	Masonry Institute of BC (Chair)	Josh Jensen	JRS Engineering
David Bruce	Ministry of Energy	Samer Daibess	JSD Envelope Engineering Ltd
Allan Dobie	CMHC	Richard Kadulski	Solplan/AIBC
George Humphrey	BOABC	Jieying Wang	FPInnovations – Forintek Division
Tony Gioventu	CHOA	Jason Teetaert	SMT Research Ltd.
Mary Kenny	RCITO	Mark Gauvin	Gauvin 2000 Construction Ltd.
Denisa Ionescu	HPO/BC Housing	Fitsum Tariku	BCIT
Liliana Dominguez	HPO/BC Housing	Rodrigo Mura	BCIT
Sophia Xian	HPO/BC Housing	Les Yard	Dow Chemical Canada Inc.
Doris Deiter	HPO/BC Housing	Gordon Monk	BC Hydro Power Smart
Lydia Durfeld	Durfeld Constructors	Ralph Moore	Travelers Guarantee
Kyle Moen	Durfeld Constructors	Rick Alexander	WBI Home Warranty
Dave Ricketts	RDH Building Engineering		

Regrets:

Patrick Shek	BOABC	Dan Bradley	Fortis BC
Graham Finch	RDH Building Engineering	Theresa Weston	Dupont Building Innovations
Jennifer Sanguinetti	BC Housing	Bob Thompson	Building and Safety Standards
		Chris Mattock	Habitat Design and Consulting

1. Approval of the Agenda/Additional Items

The meeting was called to order at 8:40 a.m. B. McEwen welcomed everyone to the meeting on behalf of BRC. The November 30, 2011 BRC meeting agenda was approved.

2. Approval of May 20, 2010 Meeting Minutes

The minutes from the May 20, 2010 BRC meeting were approved.

3. Proposal for a Review of the Energy Rating (ER) System

D. Ricketts provided a brief review of this new project. The goal is to determine if the ER in its current form can still be used to rank the overall energy performance of windows and doors appropriately for low-rise Part 9 buildings, both single and low-rise multi-unit residential. The funding partners in this project are NRCan, HPO/BC Housing, Fenestration Canada, BC Hydro, Manitoba Hydro, Quebec Hydro, AIPVFQ Quebec, WDMA BC, Fenestration Canada, CGA and GCABC.

4. Replacement Window and Door Installation Guidelines

D. Ricketts presented a brief update on the Replacement Windows and Doors Installation Guidelines project. The builder guideline document is in the final industry review stages. The consumer guideline is in preliminary development stages.

When complete, these guideline documents will be available for download on the HPO website. They will be treated as live documents and will be maintained and updated as necessary.

5. Ventilated Attics in Cool Marine Climates

P. Roppel spoke to the attic ventilation and moisture research study currently underway and scheduled for completion in 2012.

6. Prefabricating to the Passive House Standard in Canada: from the Vancouver 2010 Olympic Austria Haus to the Rainbow Passive House Duplex

L. Durfield presented an overview of the design and building process for the Vancouver 2010 Olympic Austria Haus and the Rainbow Passive House Duplex.

7. Current Research Projects

CMHC

A. Dobie provided an update on the Harmony House which is schedule to complete in December 2011. Harmony House tours are scheduled in January 2012.

HPO

D. Ionescu spoke about a few current HPO research projects and publications:

- The new *Building Enclosure Design Guide Wood-frame Multi-unit Residential Buildings* is now available for purchase on the HPO website. HPO invites BRC committee members to provide comments and suggestions for future updates.
- A recent *Builder Insight* bulletin on Fenestration Energy Performance is available online and in print.
- Organizing together with BCBECC a half-day window installation workshop on Jan 19/12 in Vancouver.
- Currently under development a study on in-slab ventilation ducts design, installation and maintenance in residential high-rise buildings. The study will assess installation of venting ducts in buildings and recommending possible changes to the building code.

Other Relevant Research

FPInnovations

J. Wang provided an update on the research project monitoring shrinkage in four-, five, and six-storey wood-frame buildings.

SMT Research Ltd.

J. Teetaert spoke to a control study on switch materials and their installation. Results of the study will be presented at Halsall.

8. Building Envelope Technician Program

M. Kenny spoke to the Building Envelope Technician Program.

9. Open Forum and Discussion – Issues Requiring Research Attention

- D. Ricketts raised the issue of energy performance standards and what happens when buildings don't meet these targets.
- D. Bruce spoke to the need of a window glazing specification document which could assist designers in addressing the criteria requirements for window selection. The new HPO *Builder Insight* on fenestration will also help.
- A. Dobie expressed concerns regarding new construction of window wall assemblies and their failure rate and general industry concerns as problems occur. A. Dobie noted a recent report by John Straube on "throw away buildings".
- R. Kadulski inquired if anyone had observed any issues with sprinkler installation in houses; some growth/oxidization was found at the sprinkler head. Is this a common occurrence or an isolated occurrence?
- R. Alexander spoke to the need for a better communication system or hand-off between sub-trades at key transition steps, particularly with single family homes.
- R. Mora spoke to the need for a study for monitoring first nations housing with the objective to obtain more information on particular problems associated with indoor environment, ventilation, mold and other problems.
- F. Tariku spoke to a few items: encourage use of BCIT Masters students for any upcoming research projects; plans to build two new buildings for building performance research; recently received additional funding to expand the BCIT laboratory.
- D. Ionescu asked committee members to forward any ideas for future research projects. D. Ionescu updated the committee on the status of the illustrated guide on seismic requirements for Part 9.
- B. McEwen suggested further local research is needed to look at wood frame shrinkage with brick veneers. CSA masonry standards are being updated for 2014 release.
- L. Yard spoke about a study of 6-7 storey rainscreen with minimal thermal bridging; possible presentation by Gary Parsons from Dow to BRC in May/12.
- J. Wang spoke to few items: development of guidelines on how to meet new energy codes in Canada and the States; collection of performance data related to energy performance survey of older generation energy efficient houses; study of wood frame fire walls performance.
- M. Kenny indicated three residential construction apprenticeship programs are scheduled for 2012.
- T. Gioventu spoke to mass water contamination with sprinkler systems in wood-frame buildings. T. Gioventu asked the committee if anyone knew of existing research available on this matter. He also mentioned two green roofs failures.
- R. Moore expressed concerns regarding maintenance of green roofs, and coating of concrete or block walls not meeting their intended life span.
- D. Bruce spoke to low e coating in sealed units and the possible association with condensation on the inside of windows. AIBC, APEGBC, GCA and the ministry working on specifications for glazing for design professionals.
- B. McEwen spoke to the addition of 3D modeling details in the Masonry Institute technical manual, which can be viewed online at masonrybc.org

10. Next BRC Meeting

Meeting scheduled for May 23 2012, 8:30am.