

MINUTES
Building Research Committee Meeting
8:30 a.m. to noon, Plaza 500
November 13, 2003

In attendance:

Bob Maling – HPO (chair)	Tony Gioventu – CHOA
Bob Switzer – Polygon	David Kayll – APEG BC
Rick Bortolussi – UBCM	Bill McEwen – Masonry Institute of BC
Richard Kadulski – AIBC	Bob Sloat – Cement Association of Canada
Bob Thompson – Building Policy Branch	Bill Billups – CWC
Alex McGowan – Levelton Engineering Ltd.	Golnar Riahi – Hal Industries
Mark Lawton – Morrison Hershfield	Ron Krpan – BCIT
Charlie Gould – Starline WindowsLtd.	Jennifer O’Connor – Forintek Canada Corp.
Mike Hollick – CWPA	Steve Zylkowski – APA
John Bell – HPO	John Robertson – City of Vancouver
Cliff Baker (guest) - Borate and the CCA/ACQ program	

Regrets:

Don Hazelden – HouseWorks Architecture	Avy Woo – City of Vancouver
Mark Angelini – Structural Board Association	Wahid Maref – NRC IRC
Michael Aoki-Kramer – City of Seattle	Linda Brock – UBC
Jan Rasilainen – St Paul Guarantee	

1. Introduction

B. Maling welcomed everyone to the meeting on behalf of BCBEC.

2. Approval of Agenda

The agenda was approved.

3. BRC Terms of Reference & Selection of Chair

D. Kayll provided an overview and background of the BRC and its Terms of Reference, noting that the Terms of Reference are not cast in stone and can be changed as needed. He also mentioned that BRC may become a model for similar committees other jurisdictions.

There was some discussion around role of the BRC/BCBEC concerning research information dissemination. Item 4 on the Terms of Reference will be clarified as follows “...[the BRC will] act as a vehicle through which the BCBEC organization can disseminate research to the industry, such as recommending BCBEC host future Building Envelope Research Symposiums, with participation/input from other industry stakeholders.”

D. Kayll noted that BRC should be financially self-sustaining. B. Maling noted that the meetings will be held in conjunction with BCBEC luncheon meetings to bring down expenses of the committee. He also noted that the HPO will continue to provide support to this committee.

J. Robertson suggested that membership needs to be expanded. J. Bell mentioned that BRC membership invitations will be sent to new organizations such as those representing building owners & managers.

B. Sloat was nominated and accepted the position of future chair of the BRC.

4. Research Planning

CMHC Report

S. Plescia provided an update of CMHC research projects, including: i) planned windows best practice guide and training guide for window installation; ii) effectiveness of window/wall interfaces project with NRC which is currently underway; iii) poured-in-place wall assembly which is currently underway; iv) a planned project looking at drainage of wall assemblies with and without cavities; v) a project on developing driving rain maps; and vi) external research project on weather and mechanical properties of gypsum. The 2 work statements developed by the (former BEREC) subcommittee on indoor humidity control and passive air inlet ventilation systems are being considered by CMHC for funding approval. There is also a 2004 planned project on wetting and drying of wood-frame wall assemblies and movement of mould spores into occupied spaces involving UBC and Forintek.

⇒ C. Gould requested a cross section of a typical detail being tested for ii) above; S. Plescia will forward this to J. Bell to distribute.

HPO Report

J. Bell provided of HPO research and education projects (handout), including: i) dissemination of water penetration of windows study; ii) monitoring performance of rainscreen wall assemblies; iii) survey of licensed residential builders; iv) survey of research and education needs of licensed residential builders in BC; v) planned project to develop basic level course on wood frame house construction with CMHC and BOABC; vi) planned project to develop new consumer protection guide on buying a new home; vii) planned project to move forward with CHOA's proposal on building envelope maintenance and renewals; and viii) planned project on developing educational tool for consumers to better understand home warranty insurance. J. Bell also highlighted HPO funding partnerships with CMHC on the following projects: poured-in-place wall assembly, best practice guide for windows projects as well as the proposed project on indoor humidity control and passive air inlet ventilation systems.

5. Current Research Issues/Priorities

B. Maling mentioned that a standing item on the BRC agenda is for a general discussion on current and emerging research issues.

McGowan - Ashrae research underway on solar gain and heat loss and its relation to the building envelope and fenestration in multi-unit buildings.

⇒ A. McGowan will forward this research to J. Bell to distribute to the committee.

M. Lawton - Ashrae research on moisture prevention in wall systems, and the issue of what kind of indoor moisture load do you design for, and comparatively more research on seismic issues in the U.S. compared to Canada.

B. McEwan – may need research on the impact of sustainable design/green building/LEED on the building envelope and durability. E. Sterling suggested that we might consider a task group to look at LEED Canada criteria that is being finalized, similarly B. McEwan suggested that this could be an ongoing agenda item for BRC.

⇒ E. Sterling to provide J. Bell with draft of LEED Canada for distribution and feedback from the committee.

E. Sterling – Health Canada/NRC is holding a science and technical workshop in Montreal Nov 24/25 on moisture & mould in buildings, the purpose of which is to identify research priorities across Canada.

⇒ B. Maling suggested a report-back on this workshop at the next BRC meeting.

J. Bell – HPO would like the input of the BRC on a potential research & education project on the re-use of windows in building envelope renovations (handout provided). Generally, the proposed project focuses on factors related to the re-use of windows in a building envelope renovation. T. Gioventu mentioned that some windows should not be re-used, but are being re-used. C. Gould described issues related to re-use of windows vs. use of new windows. M. Lawton mentioned that research is needed on this.

⇒ A task group was formed to look further into this issue, consisting of C. Gould, J. Bell, T. Gioventu, M. Lawton.

D. Kayll – Research could be carried out over the coming year to look at buildings that have experienced a repeat failure. It was suggested that this type of information would be useful for consumers in evaluating the merits of doing a proper vs. band-aid repair. S. Plescia mentioned that the study could evaluate the durability and/or cost-effectiveness of different repair options.

⇒ B. Maling said that the HPO will look further at this issue, and come back to the committee with a research proposal.

6. Poured-in-Place Concrete Wall Study

Brian Hubbs of RDH Building Engineering presented an overview of the status and findings of the draft poured-in-place concrete wall study (power-point presentation). The following items were discussed: some concern over the study's recommendation on use of coatings, and need for further verification/peer review of modeling analysis. Committee members were asked to provide Brian with their comments/concerns by November 21st.

7. Building Envelope Test Hut/BCIT Update

R. Krpan provided an update on a new building science course at BCIT, its new green roof research project, and potential research partnership with Concordia University. In terms of establishing the test hut, BCIT is awaiting a decision on its application for funding for a Research Chair position.

8. Review of Energy Performance Measures for Buildings in B.C.

R. Kadulski provided an update and handout on this provincial government initiative. Generally, the purpose of the review is to identify ways to improve energy efficiency of new and existing buildings in BC and develop options for implementing them.

9. Next meeting date – March 11, 2004