

MINUTES
Building Research Committee Meeting
9:00 a.m. to 11:30 a.m., Plaza 500
May 11th, 2004

In attendance:

Bob Sloat – Cement Association of Canada (chair)	Elia Sterling – Theodor Sterling Associates
Silvio Plescia – CMHC National Office	Richard Kadulski – AIBC
Alex McGowan – Levelton Engineering	Ron Krpan – BCIT
Lowell Wade – CWC WoodWORKS	Golnar Riahi – HAL Industries
Chris Kiiveri – HPO	Greg Johnson – UBC
John Robertson – City of Vancouver	John Bell – HPO
Steve Olmstead – BCREA	Allan Dobie – CMHC

Regrets:

Warren Knowles – BCBECC	Brian Palmquist – EcoDesign.ca
Bill McEwen – Masonry Institute of BC	Gregg Lowes – BCWCA
Michael Hollick – CWPA	Bob Switzer – Polygon
Jennifer O'Connor – Forintek	Linda Brock – UBC School of Architecture
Bob Thompson – Building Policy Branch	

1. Introduction

B. Sloat welcomed everyone to the meeting on behalf of BCBECC.

2. Approval of May 11/04 Meeting Minutes

Forwarded by E. Sterling, Seconded by R. Krpan. Carried.

3. Approval of Agenda

The agenda was approved.

4. Building Research Symposium Update

J. Bell provided an update of the upcoming Building Research Symposium, which is hosted by BCBECC. Since the last update at the previous BRC meeting, a presentation by Forintek on mould and wood has been added to the agenda, and the panel discussion speakers on green building are confirmed. There are approximately 100 registrants to date.

5. Research Planning Update

B. Sloat stated the focus of this meeting is to discuss and plan for upcoming research projects and asked for an update from CMHC and the HPO.

CMHC Report

S. Plescia mentioned that CMHC was changing the cycle of research projects to align more with industry. From May 10, 2004, there is a two-week window to submit research projects that will be considered for 2005. The first review of submitted projects occurs in June with the approval process occurring in December. Once approved, the project commences in January or February of 2005, even though funding money is not received until April. CMHC research project updates include:

i) **Best Practice Guide for Windows**

The tenders closed for this project at the end of April. Thirteen invitations were sent out, with four firms submitting proposals. The project is now in the hands of the steering committee and the contract will be awarded at the end of May with project completion in March 2005. CMHC is exploring U.S. marketing opportunities for the document and is holding focus group sessions in four locations across the country.

ii) **Effectiveness of Window/ Wall & Interface Details**

The basis of this project is to study the effectiveness in managing water intrusion into wall assemblies. It will test variables that may have an effect on the window/ wall interface such as pressure differentials (from 0-800 Pa), A440 ratings, different window mounting methods, and different sheathing papers. The project duration is expected to be three years, split into three phases. Phase I will disseminate information via seminars and the information will be incorporated into the Best Practice Guide. The project will take into account specific details and climatic loads from across Canada.

iii) **Water Penetration Characteristics of Wall Assemblies**

The contract was awarded to Forintek East two weeks ago and is a lab-based study with completion expected in March 2005. The project will explore the effectiveness of approximately 25 different wall assemblies and configurations. Wall cavities will range from 0mm to 10mm with a variety of cladding systems such as wood siding, HardiPlank, and EIFS. Two or three types of drainage media will be explored in addition to the wall cavity space. To quantify the results, water will be introduced into the cavity and a number of factors will be studied: where the water goes, how much water is retained, where the water is retained, and how it is retained.

B. Sloat mentioned that there should be a linkage to B.C. to follow the progress of the project, e.g., through BCBEAC. A. McGowan asked if field-testing of windows would be included in the project. S. Plescia answered not at this time, there is no consistency in details and construction. B. Sloat questioned how many of the 25 assemblies are typical to the West Coast. S. Plescia said all of the assemblies are typical to the West Coast.

HPO Report

J. Bell mentioned that the HPO research cycle coincides with the fiscal year. The HPO research and education department initiatives include technical research, information dissemination, education and training, and information targeted to consumers. An update of HPO research and education projects from the Spring 2004 Summary of Projects (handout) was provided including:

- The Building Smart seminar provides information to small volume builders. The focus of the seminar was avoiding moisture problems in homes and defining the difference between an air barrier and vapour barrier. Approximately 467 attendees participated in the seminar throughout B.C.
- Development of a Basic Level Course on Wood-Frame Construction project RFP will be released by June.
- The Survey of Licensed Residential Builders has provided ideas for more potential research and education projects.

J. Bell attended the World Building Congress Symposium in Toronto and the studies from the CD could be loaned to those who request it.

6. Discussion: Current Research Issues/ Priorities

J. Bell provided a list of BRC Potential Research and Education Projects (handout), which was developed by reviewing projects identified by BERC as of June 2003, and by reviewing possible projects that had been mentioned by BRC members over the past year. S. Plescia indicated that some of the projects were not possible due to a lack of management resources at CMHC, e.g. ventilation and indoor air quality work statements developed by BERC, and there is a possibility that Allan Dobie could handle the day-to-day management of some projects in the future. Another possibility is to have the HPO managing the project with HPO/CMHC co-funding the project. J. Bell provided some background on the following projects:

- Model Buildings Research Project - industry did not come forward on this project.
- Impact of LEED on Envelope & Durability – the topic is an area of interest to the HPO Board of Directors especially concerning the performance of the building envelope.
 - J. Robertson mentioned that a hybrid version of LEED would be introduced into the SE False Creek and Downtown. The City of Vancouver is concerned that a LEED rating cannot be achieved until the building has been completed.
 - E. Sterling would like the key issues to be developed into a work statement. LEED Canada has a credit for the building envelope durability but does not address other areas of durability. The committee should look at issues, if any, before approaching the CaGBC.
 - J. Robertson stated that when LEED is not implemented correctly, problems could occur because the focus is on the single-minded objective of obtaining credits.
 - B. Sloat said we should be more involved to raise awareness and suggested that a committee could be formed to define the issues.

⇒ J. Bell to follow-up with interested BRC members to discuss the issues related to green building rating systems and building envelope performance.

- Re-use of windows in building envelope renovations – no action has been taken to date. A. McGowan mentioned a task group for the project was formed. Stratas want to re-use windows but this raises issues with warranty providers. E. Sterling said a program should be developed for risk management. B. Sloat stated that parameters are needed regarding the re-use of windows and under

what conditions. A. McGowan suggested that criteria should be developed to determine re-use. S. Plescia mentioned that workshops could be implemented to get the information out to homeowners and stratas. B. Sloat agreed that workshops make the most sense to disseminate information. A. McGowan mentioned that an information package could be made available also.

⇒ J. Bell to work with sub-committee to develop a framework of parameters for a workshop, to be discussed at the next meeting

S. Plescia mentioned that repaired buildings with five-year warranty coverage would be coming due soon. The buildings that have been repaired should be monitored to see if any other failures or problems have developed.

There was general discussion about information is lacking for single detached builders and that multi-family builders have more information available such as the best practice guide, and that there is a gap in information and technology transfer for single-family builders.

7. Meeting Adjourned. Next meeting date – September 16th, 2004 (NOTE: THIS DATE HAS BEEN CHANGED TO SEPTEMBER 8TH, 2004)