#### **MEETING NOTES**

# **Building Research Committee Meeting**

Wednesday, November 25, 2009, 8:30am to 12:00pm Plaza 500 Hotel & Convention Centre – Granville Boardroom 500 West 12<sup>th</sup> Avenue, Vancouver

**Bob Sloat** 

Surety Association of Canada

#### In Attendance:

Bill McEwen

DIN 1.1013 W C11	made in a second	Bob blott	ource, mossemant or ourman
David Bruce	Ministry of Energy, Mines and Petroleum Resources	Gary Brown	WDMA-BC
Allan Dobie	СМНС	Jieying Wang	FPInnovations – Forintek Division
Denisa Ionescu	НРО	Hau Ge	BCIT
Liliana Dominguez	HPO (recording)	Fitsum Tariku	BCIT
Mary Kenny	RCITO	Fred Tai	Simpson Strong-Tie
Richard Kadulski	AIBC	Ron Rapp	Morningstar Homes Ltd.
Dave Ricketts	RDH Building Engineering	Dan Bradley	Terasen Gas
Warren Knowles	RDH Building Engineering	Gary Lengle	Terasen Gas
Graham Finch	RDH Building Engineering	Rick Alexander	National Home Warranty
Anik Teasdale-St. Hilaire	Morrison Hershfield	Bernie Hoing	Travelers Guarantee
Mark Lawton	Morrison Hershfield	Karen Liu	Xero Flor International
Douglas Watts	Read Jones Christoffersen	Chris Mattock	Habitat Design + Consulting

# Regrets:

Silvio Plescia	СМНС	Ken Farrish	BCBuilding
Tony Gioventu	СНОА	Les Yard	Dow Chemical Canada Inc.
Patrick Shek	BOABC	Ernest Kortschak	Dupont
George Pinch	GVHBA	Greg Johnson	UBC School of Architecture
Brennan Vollering	Halsall Associates	Brain Delbrueck	Canadian Institute of Treated Wood
Graeme Scott	Halsall Associates		

# 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 25, 2009 BRC meeting agenda was approved.

# 2. Approval of May 20, 2009 Meeting Minutes

The minutes from the May 20, 2009 BRC meeting were approved.

Masonry Institute of BC (Chair)

#### 3. Best Practice Guide: Wood-Frame Envelopes in Coastal BC Climate – Proposed Changes

D. Ricketts provided an update on the status of the Best Practice Guide on Wood Frame Envelopes; proposed revisions/comments received are in process of being incorporated into the guide outline.

D. Ionescu informed that the guide will be supplied in an electronic format and that users would be able to either download the document or place an order with a printing house.

BRC Minutes November 25, 2009

## 4. Energy Consumption in High-rise Rehabilitated Buildings

G. Finch provided an update on Phase II of the research study on energy consumption in high-rise rehabilited buildings. Phase I of the project assessed energy consumption and efficiency in mid and high-rise multi-unit residential buildings and identified the need for improvements in areas of space conditioning energy use, energy conservation and occupant behavior. Metering for gas fireplace consumption was identified as an issue. Discussion ensued.

## 5. Harmony House Project

C. Mattock provided an overview on the design, project description, and key features of the Harmony House project, scheduled for construction March 2010 in Burnaby. It is one of the CMHC EQuilibrium projects, and can be followed at www.harmony-house.ca.

# 6. Wood Infill Wall Application in Concrete and Steel Structures

J. Wang spoke to wood infill wall applications in concrete and steel structures used in Europe.

# 7. Recently Completed or Current Research Projects CMHC

A. Dobie provided an update on CMHC's EQuilibrium project in Kamloops, the Green Dream Home.

#### HPO

D. Ionescu provided and update of current HPO research projects, publications and seminars.

## 8. Wind Driven Rain Measurements in the Lower Mainland

H. Ge presented results of the Wind-driven Rain Study in the Coastal Climate of British Columbia. The study assessed methods of quantifying wind-driven rain exposure as a function of building geometry and design details. The report is posted on the HPO website.

#### 9. Open Forum and Discussion

- G. Brown spoke to the study on the thermal performance of wood door and its preliminary findings.
- M. Kenny provided details about the new ITA-approved Building Envelope Technician (BET) program and requested the BRC support with the program launch. BET materials are available for review on the ITA website.
- D. Rickets spoke to two emerging issues related to insulating glass unit failures and to polyurethane membrane failures early in their life cycles.
- D. Watts gave a brief update on issues being considered by the Part 5 National Code committees for the next code cycle.
- M. Lawton spoke to an ASHRAE research project currently in progress. Laboratory testing has been completed and 3D software is being used for thermal resistance and thermal capacitance analysis. The data is being validated right now. Forty wall configurations were analyzed. If anyone is interested in a specific wall configuration, contact Mark Lawton. A detailed presentation on this research will be made at the next BRC meeting.
- G. Lengle reported issues related to improper venting locations of HRVs.

BRC Minutes November 25, 2009

- C. Mattock noted that NRC is funding a research on vacuum insulated panels.
- R. Kadulski spoke to a research related to the locations of sidewall venting of gas fired appliances and the effect on the durability of the building envelope.
- J. Wang reported that FPInnovations Forintek Division are interested in testing wood frame shrinkage in 2010.
- F. Tai noted a six storey building will be built in Richmond in February-March. A presentation on the testing of a six storey wood frame building done in Japan will be made at the next BRC meeting.
- F. Tariku spoke to the HPO-BCIT project related to the update of the Building Envelope Research Database which provides online access to articles related to building science. This online database is posted on both the HPO and BCIT websites.
- D. Bruce enquired if anyone has heard of issues regarding failures attributed to the use of Chinese drywall.

# 10. Next BRC Meeting

Meeting scheduled for May 26, 2010.

BRC Minutes November 25, 2009