# Meeting Notes Building Research Committee (BRC)

Wednesday, November 1, 2017, 8:30 a.m. to 12:00 p.m.
The Italian Cultural Centre Society
3075 Slocan Street
Vancouver, BC

Denisa Ionescu, BC Housing (Chair) Bill McEwen **Past Chair** Bob Sloat, Surety Association of Canada Cindy Moran, BC Housing Devin Pickles, Travelers Don Munich, Travelers Douglas Bennion, ICFMA Einar Halbig, E3 ECO Group Elyse Henderson, RDH Building Science Ernest W. Kortschak, DuPont Protection Solutions Farshid Borjian, Masonry Institute of B.C. Hamid Heidarali, Hamid Design Build Hannah Edmunds, Vancouver Heritage Foundation Helen Goodland, Brantwood Consulting James Higgins, RDH Jason Teetaert, SMT Research John Riley, InterCoast

Judith Mosley, Vancouver Heritage Foundation Julio Reynel, JRG Building Engineering Keith Calder, Jensen Hughes Khaleed Khondoker, SMT Laurence Matzek, RCABC Les Yard, Dow Building Solutions Lorne Rickettes, RDH Building Science Mark Gauvin, Gauvin Construction Michelle Lee, BC Housing Opreet Kang, Forestry Innovations Investment Patrick Roppel, Morrison Hershfield Phalguni Mukhopadhyaya, University of Victoria Ralph Moore, Aviva Canada Remi Charron, BC Housing Richard Kadulski, Architect Sukh Johal, WoodWorks!BC Terry Rudolph, Cascadia Inspection Wei Chen, Tri-Can Consulting Wilma Leung, BC Housing

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

The minutes from the April 19, 2017 meeting were approved.

#### 2. Heritage Energy Retrofit Grants Program

Judith Mosely of the Vancouver Heritage Foundation, presented on The Heritage Energy Retrofit Grant, developed to encourage retrofits in heritage homes, while also maintaining the structure's character. The program was designed to provide guidance on measures to reduce energy and water consumption and Green House Gas Emissions, in addition to improving indoor comfort.

### 3. Long Term Performance: Unventilated Wood Framed Roofs Using Polyurethane Foam

Hamid Heidarali, HDB presented on results from a study that evaluated the effects of air and vapour barrier materials in attics with sloped-roofs, and the implications of considering the attic as part of the thermal envelope. The study compared the efficiency of various assemblies under unfavourable conditions to highlight potential risk factors, and identify particle implications.

## 4. Building Envelope Fire Risks – Using Combustible and Non-Combustible Cladding and Continuous Insulation in Low, Mid and High-Rise Buildings

Keith Calder, Jensen Hughes presented on research conducted to develop approaches for fire risk assessment for combustible and non-combustible buildings, during and post construction. The study evaluated compartment, concealed space and exterior fire development, in low, mid and high-rise buildings, to identify key fire spread factors that increase risk.

### 5. R22+ Walls for Low and Mid-Rise Buildings

James Higgins presented on the recently updated Illustrated Guide R22+ Effective Walls in Residential Construction in B.C. The third edition of the guide shifts away from single family homes and includes row-homes and multi-unit residential buildings up to six storeys. Details include mid-rise design and fire risk considerations during construction and for completed assemblies.

### 6. Low Thermal Energy Demand for Large Buildings

Patrick Roppel of Morrison Hershfield presented on the Guide to Low Thermal Energy Demand Intensity (TEDI) for Large Buildings, which intends to broaden the understanding of how high-rise residential buildings can meet the next generation of Net Zero or Net Zero ready standards. The guide introduces and reinforces the new Low Energy Demand Intensity (TEDI) metric and provides insight to Thermal bridging calculation methodologies, HRV testing protocols, Low TEDI in the context of whole building energy, as well as design and construction requirements for low TEDI buildings.

### 7. Builder's Guide to the Energy Step Code

Elyse Henderson, RDH Building Science presented on the Illustrated Guide – Builders Guide to the Energy Step Code, being developed to assist the building industry identify the most cost-effective and energy-conserving measures to meeting the BC Energy Step Code, for both Part 9 and Part 3 multi-unit residential construction up to 6 Stories.

### 8. Forum Discussion

- Am attendee brought-up the need to distribute more information on fire risk, either in guide format or webinars. Ideally a guide providing solutions and a prescriptive path would be developed to reduce the amount of miss-understanding within the industry
- Denisa mentioned BC Housing plans to add a section on fire risk considerations in the R22+ illustrated guide and will possibly organize a fire risk mitigation workshop
- Lorne Rickettes announced that the Illustrated Guide to Achieving Airtight Buildings is officially completed
- Denisa announced BC Housing is accepting applications for research and education grants until January
- Wilma provided an update on the LEEP initiative