



Questions & Answers

New HPO Publication: Building Enclosure Design Guide – Wood-Frame Multi-Unit Residential Buildings

Q. What sets the *Building Enclosure Design Guide – Wood-Frame Multi-Unit Residential Buildings* apart from other best practice guides?

A. This new Guide is an invaluable reference for the construction industry. It explores the latest research, design and construction best practices for building enclosures in wood-frame, multi-unit residential buildings. This includes design associated with wood-frame construction in five and six-storey mid-rise buildings. The Guide updates earlier best practice guides that have been instrumental in creating a consistent approach to the design and construction of effective building envelopes.

Q. What is the purpose of the Guide?

A. This Guide builds on industry knowledge gained over the past decade and is designed to enhance the quality of wood-frame, multi-unit residential buildings constructed in British Columbia. It offers practical information and useful guidelines to help ensure that new residential buildings in B.C. are well constructed with durable building enclosures.

Q. Who developed the Guide?

A. The Guide was developed by the Province, through the Homeowner Protection Office (HPO), in collaboration with an industry task group. The Guide was prepared in conjunction with RDH Building Engineering Ltd., a leader in the building enclosure field throughout Canada and the U.S.

The Province is committed to working with industry to advance knowledge and generate new technology, particularly when it comes to wood-frame construction, which is the predominant method of residential construction in the province. The goal is to ensure that residential buildings constructed in B.C. are among the most comfortable, durable and energy efficient in the world.



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Q. Is the Guide endorsed by industry?

A. The Association of Professional Engineers and Geoscientists of BC (APEGBC) and the Architectural Institute of BC (AIBC) have both endorsed the publication, having participated on the industry steering committee that contributed to the development of this comprehensive reference Guide.

Q. Is the Guide based on requirements of the British Columbia Building Code?

A. The discussion and details contained in the Guide are based on current building science principles and British Columbia Building Code requirements that continue to be explored by many industry groups and professionals. A key change in the British Columbia Building Code 2006 (BCBC), and in the 2007 Vancouver Building By-Law (VBBL), has been the provision for the use of wood-frame construction in five and six-storey buildings. This Guide addresses building enclosure performance issues associated with these taller structures.

Q. Who will benefit from using the Guide?

A. This publication is intended to assist members of B.C.'s residential construction industry – particularly builders, architects, designers and contractors - with the design of multi-unit, wood-frame residential buildings. It's also an excellent resource for industry educators.

Q. Does the Guide address the construction challenges presented by British Columbia's diverse climate?

A. The Guide specifically addresses the construction challenges presented by British Columbia's diverse climate, and in particular, our unique coastal climate. While B.C.'s climate presents distinct challenges for the design and construction industry, it has inspired advancements in building envelope technology that have been adopted throughout the world.



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Q. Is the Guide useful for other jurisdictions?

A. Yes, this comprehensive best practice Guide is also useful for other jurisdictions - across Canada, the U.S. and other regions - that share similar building enclosure construction challenges. Developing practical reference tools for B.C.'s residential construction sector and sharing this knowledge with other jurisdictions raises the profile of our industry. It also reinforces British Columbia's reputation as having one of the most dynamic and innovative residential construction sectors in North America.

Q. Does the Guide provide guidelines for single-family residences as well as larger multi-unit residential building?

A. The Guide is specifically intended for larger wood-frame, multi-unit residential buildings. This includes design associated with wood-frame construction in five and six-storey mid-rise buildings.

Q. How is the Guide organized?

A. Organized with best practice in mind, the Guide takes the user from an understanding of the behaviour of wood as a material to the fundamentals of heat, air and moisture control, and energy provisions for the building enclosure. It presents design guidelines for assemblies, details, components and materials being used successfully in Canada and in other parts of the world. The final chapter covers planning for the maintenance and renewal of the building enclosure over its service life.

Q. Where can I obtain a copy of the Guide?

A. To find out more or to purchase a copy of the printed *Building Enclosure Design Guide – Wood-Frame Multi-Unit Residential Buildings* from the Homeowner Protection Office visit www.hpo.bc.ca. The Guide can be purchased for a cost of \$70 CAD (plus taxes and shipping) from the HPO's Online Store hosted by GiftTool, a trusted provider of secure web-delivered e-commerce services.