



BC Energy Step Code in New Westminster

*Design Stage compliance requirements for BC Energy Step Code
New Part 9 and Part 3 buildings on sites with protected heritage buildings*

Purpose & Background

New Westminster City Council endorsed local implementation of the BC Energy Step Code on April 9 and December 10, 2018.

The purpose of this bulletin is to inform applicants and designers of **new Part 9 and Part 3 residential buildings on sites with protected heritage buildings** (as part of a Heritage Revitalization Agreement), regarding energy performance requirements and home energy labeling. Step Code requirements apply to the new construction portion of the development, and any protected heritage buildings that are a part of the development are exempt from the Step Code. However, applicants are encouraged to consider including energy efficiency upgrades to the heritage building that are respectful of the original materials and design.

New buildings that are part of a Heritage Revitalization Agreement (HRA) undergo design review by City staff as part of the HRA, prior to Building Permit. Applicants for such projects should contact the Planning Department to discuss requirements and process related to Step Code.

Please refer to the **Additional Information** section at the bottom of this bulletin for information related to the BC Energy Step Code for Part 9.

About the BC Energy Step Code

The BC Energy Step Code requires new buildings to meet higher energy efficiency standards than the minimum prescriptive requirements in the BC Building Code.

The Step Code is a province-wide performance standard requiring new buildings to attain higher energy performance by meeting set targets for the building envelope, mechanical system efficiency and airtightness. Energy modeling software and on-site air tightness testing is used to demonstrate Step Code compliance, indicating that the building meets the required performance level at the pre-construction stage as well as project completion.

The Step Code provides the design and construction industry with an indication of what minimum energy performance requirements will be in subsequent Building Code updates. The Province has signaled that the base BC Building Code will increment over the next three update cycles, to reach a “net-zero energy ready” performance level by 2032. Over time, and supported by ongoing industry engagement, the City of New Westminster intends to incrementally raise minimum energy performance to the highest levels of the Energy Step Code in advance of 2032.

More information about the BC Energy Step Code is available at energystepcode.ca



Image 1: Installation of a prefabricated wall assembly for a high performance new home under construction in New Westminster next to a protected heritage building.



Image 2: A completed high performance new home in New Westminster located next to a protected heritage building.

¹ The Council Report is available online at bit.ly/NewWestCouncilReport (see item #20)

Implementation

For Part 9 projects, the City’s Building Bylaw requirement is Step 2 for laneway and carriage houses, and Step 3 for all other residential buildings. For Part 3 project Building Bylaw requirements, see Bulletin 3. To comply with the Step Code, builders / developers must work with a Licensed Energy Advisor and/or a Registered Professional to ensure that the building’s design meets all applicable energy performance and administrative requirements.

All Registered Professionals are encouraged to follow the *Joint Architectural Institute of BC and Engineers and Geoscientists BC Professional Practice Guidelines – Whole Building Energy Modelling Services*².

Working with an Energy Advisor

Energy Advisors are third-party consultants who have been registered by Service Organizations licensed by Natural Resources Canada (NRCan) to deliver NRCan’s EnerGuide Rating System (ERS), ENERGY STAR® for New Homes and R-2000 programs. An Energy Advisor can provide both energy modelling and airtightness testing – the two compliance services needed to demonstrate compliance under the BC Energy Step Code for Part 9 buildings. For more information on energy advisors, including guidance for finding an energy advisor for your project, visit www.energystepcode.ca/energy-advisors/



Image 3: An air tightness (“blower door”) test during Mid-Construction Stage

Note that for Passive House projects, the City expects that a Certified Passive House Designer or Certified Passive House Consultant will be involved in developing the energy model using Passive House Planning Package (PHPP) version 9 or newer and submitting the necessary Step Code compliance forms, as per the requirements in this bulletin.

Additional Information

BC Energy Step Code

- Receive up-to-date information by signing up for the Province of BC’s Energy Step Code Stakeholder Update newsletter bit.ly/EnergyStepCodeNewsletter
- To learn more about the BC Energy Step Code, including performance requirements, resources for industry, and upcoming events, visit energystepcode.ca
- For the latest technical bulletins related to the BC Energy Step Code and BC Building Code, visit bit.ly/ESCTechnicalBulletins
- If you have additional questions regarding the BC Energy Step Code, visit energystepcode.ca/contact-us/ or email building.safety@gov.bc.ca

City of New Westminster’s Implementation of the BC Energy Step Code

- Sign-up for email notifications whenever new information is available, including bulletin updates, education and engagement opportunities, and incentives and capacity building opportunities energysavenewwest.ca/sign-up-for-e-news/
- For information about the City of New Westminster’s implementation of the BC Energy Step Code, visit newwestcity.ca/energy-step-code
- For information on Energy Save New West’s High Performance New Home program with the latest program services and incentives available energysavenewwest.ca/new-homes/
- If you have additional questions regarding the City’s implementation of the Step Code, you can reach us at StepCodeInfo@newwestcity.ca

² Download AIBC and EGBC’s Joint Professional Practice Guidelines for Whole Building Energy Modelling Services here: www.egbc.ca/Practice-Resources/Professional-Practice-Guidelines

Additional Information Continued

City of New Westminster's Heritage Program:

- For information about working with a heritage building in the City, visit bit.ly/NewWestHeritage

Additional Guidance for Applicants

The City of New Westminster has created a series of bulletins that describe how new Step Code requirements are addressed and captured through the development application process for various building typologies. These bulletins are summarized and linked below.

- 1** **Bulletin 1** – General Information for Applicants - **Planning or Development Applications and Building Permits**
- 2** **Bulletin 2** – Building Permit compliance requirements for BC Energy Step Code, New **Part 9 Single Family, Duplex, and Laneway and Carriage Houses**
- 3** **Bulletin 3** – Design Stage and Building Permit compliance requirements for BC Energy Step Code, New **Part 3 Multi-Unit Residential and Commercial Buildings**
- 4** **Bulletin 4** – Design Stage compliance requirements for BC Energy Step Code, **New Part 9 and Part 3 Buildings on Sites with Protected Heritage Buildings**
- 5** **Bulletin 5** – Design Stage compliance requirements for BC Energy Step Code, New **Laneway and Carriage Houses**
- 6** **Bulletin 6** – Part 9 Multi-Unit Residential Buildings **Townhouses and Small Multi-Unit Residential Buildings**

Rebates & Incentives

The City has developed educational materials and incentive programs to help the transition toward higher levels of energy performance in new construction.

For more information, visit:

energysavenewwest.ca/energy-step-code

Need more info?

For more information and resources on the BC Energy Step Code, including the implementation and design guides, costing study, technical resources, and FAQs, visit energystepcode.ca



Additional questions about BC Energy Step Code in New Westminster?

Contact us at StepCodeInfo@newwestcity.ca or call **604.515.3818**