February 4, 2025
BUILDING DIVISION

BC Energy and Zero Carbon Step Code Requirements for Part 9 Buildings: Single Family Dwellings — Detached and Semi-Detached, Garden Suites, Townhouses, and Low-rise Apartments and Condos

DISCLAIMER: The information bulletin is subject to future versions. Notes below indicate some, but not all, items that may be revised.

Purpose and Background:

On May 1, 2023, the Province enacted changes to the BC Building Code that required Part 9 buildings to meet Step 3 of the BC Energy Step Code. Starting March 10, 2025, the Province will be enacting additional requirements to meet Zero Carbon Step EL-1 to measure and disclose operational greenhouse gas emissions for new Residential, Commercial, Office and Retail projects.

As a minimum, applicants are required to submit an energy model as part of the building permit submission and conduct an air tightness test when construction is complete and at mid-construction where applicable. All applications submitted on or after March 10, 2025 will also be required to provide additional data to measure and disclose operational greenhouse gas emissions for residential buildings.

Airtightness is the most cost-effective way to improve building energy performance. An airtight building is also easier and less costly to achieve and confirm prior to drywall installation. As such, The City will require a mid-construction blower door test for this phase. The mid-construction blower door test may not be necessary if air-tight drywall is used. However, demonstrating compliance with the Step Code requirement is still mandatory. The mid-construction blower door test is required to be completed prior to insulation inspection.

- Refer to the **Additional Information** section at the bottom of this bulletin for additional Step Code information and resources.
- Refer to **Appendix 1** for details on the City's building energy labelling requirements.
- A separate bulletin has been prepared for BC Energy and Zero Carbon Step Code and associated requirements for **Part 3 Buildings**.

Implementation:

Effective May 1, 2023, Step 3 of the BC Energy and Zero Carbon Step Code will apply to all new building permit applications for single family buildings both detached and semi-detached, garden suites, townhouses, and low-rise apartments and condos. Starting on March 10, 2025, Step EL-1 provisions intended to measure and disclose operational greenhouse gas emissions will be added. To comply with the BC Energy and Zero Carbon Step Code, builders must work with a Licensed Energy Advisor and/or a Registered Professional to ensure building designs meet all applicable energy performance and administrative requirements, and disclose operational greenhouse gas emissions.

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*.[1]

Note: Step Code provisions apply to new construction only and do not apply to renovations.

Building Permit Submission Requirements:

Applicants are expected to use conservative airtightness assumptions in energy models for Step 3. Applicants that do not use a conservative airtightness assumption risk designing and constructing homes that will not meet the Step 3 performance requirements and delaying occupancy at Final Building Inspection.

Compliance Pathway Requirements at Building Permit Submission The following documents must be completed and submitted with the Building Permit application package.	
City's Preferred Path **EnerGuide Rating System:** *Licensed Energy Advisor*	**9.36.5:** *Registered Professional required*
1. *BC Energy Compliance Report – Performance Paths for Part 9 Buildings: Pre-Construction form*[2] completed by a Licensed Energy Advisor. Sections A, B, D, E, and F must be completed. Sections C and G should be completed if applicable. 2. Printed copy of HOT2000 Full House reports (or equivalent model) for both the proposed and reference buildings. Effective March 10, 2025 the report must include data to measure and disclose the operational greenhouse gas emissions. 3. For each Licensed Energy Advisor, a copy of a valid certificate of insurance showing general liability insurance and errors and omissions insurance. 4. Plan drawings clearly showing all energy efficiency upgrades and type of air barrier.	1. *BC Energy Compliance Report – Performance Paths for Part 9 Buildings: Pre-Construction form*[3] stamped with signature and date by a Registered Professional. Sections A, B, D, E, and F must be completed. Sections C and G should be completed if applicable. 2. Printed copy of the HOT2000 Full House reports or alternative energy model reports for both the proposed and reference buildings stamped with signature and date by a Registered Professional. Effective March 10, 2025 the report must include data to measure and disclose the operational greenhouse gas emissions 3. For each Registered Professional, a copy of a valid professional liability certificate of insurance. 4. Plan drawings clearly showing all energy efficiency upgrades and type of air barrier.

*Note: The City may contact the Energy Advisor or Registered Professional to submit the associated model files for auditing purposes.

Development Permit Applications and Approvals:

As part of the development permit applications, applicants are expected to conduct energy modelling and provide a statement to the City that their proposed design will meet the City's Energy Step Code requirements in place at the time of the associated building permit application. This statement must be submitted prior to the City considering development permit application. It is incumbent on applicants to ensure their proposed building design will meet the City's Energy Step Code requirements. Any revisions to building design may require applicants to reapply for updated development permit approvals.

[1] Download AIBC and EGBC's *Joint Professional Practice Guidelines for Whole Building Energy Modelling Services* here: https://www.egbc.ca/Practice-Resources/Professional-Practice-Guidelines

[2] Download the *BC Energy Compliance Report – Performance Paths for Part 9 Buildings: Pre-Construction form* here: https://energystepcode.ca/for-industry
Compliance checklists for Part 9 buildings | Energy Step Code

Final Building Inspection Requirements:

All new Part 9 buildings must demonstrate compliance with either the EnerGuide Rating System or 9.36.5 pathway listed in the Compliance Pathway Requirements table below. Note the building energy label requirement and see **Appendix 1** for more information.

Compliance Pathway Requirements at Final Building Inspection	
City's Preferred Path **EnerGuide Rating System:** *Licensed Energy Advisor*	**9.36.5:** *Registered Professional required*
1. Post-construction blower door test is required. Provide Building Inspections Section with a minimum 48-hour advance notice of a scheduled blower door test so that a Building Official may attend the testing, at the City's discretion. 2. *BC Energy Compliance Report – Performance Paths for Part 9 Buildings: As-Built form*[3] completed by a Licensed Energy Advisor, indicating post-construction blower door test results and verification of all building energy efficiency upgrades and zero carbon emission upgrades. Sections A, B, D, E, and F must be completed. Sections C and G should be completed if applicable. 3. Revised printed copy of HOT2000 Full House reports for both the building as constructed and the reference building. The model must incorporate the post-construction blower door test result in the HOT2000 "n-file" energy model. 4. An EnerGuide Rating System label affixed on or near the electrical panel.	1. Post-construction blower door test is required. Provide Building Inspections Section with a minimum 48-hour advance notice of a scheduled blower door test so that a Building Official may attend the testing, at the City's discretion. 2. *BC Energy Compliance Report – Performance Paths for Part 9 Buildings: As-Built form*,[7] stamped with signature and date by a Registered Professional, indicating post-construction blower door test results and verification of all building energy efficiency upgrades. Sections A, B, D, E, and F must be completed. Sections C and G should be completed if applicable. 3. Revised HOT2000 Full House reports or alternative energy model reports, stamped with signature and date by a Registered Professional, for both the building as constructed and the reference building. The model must incorporate the post-construction blower door test result in the HOT2000 or other energy model. 4. EnerGuide Rating System, Passive House Certification or other eligible home energy label affixed on or near the electrical panel. See Appendix 1 for information required for a valid comparable Home Energy Label.

*Note: The City may contact the Energy Advisor or Registered Professional to submit the associated model files for auditing purposes.

Additional Information:

https://energystepcode.ca/compliance-tools-part9/
Compliance checklists for Part 9 buildings | Energy Step Code

[3] Download the *BC Energy Compliance Report – Performance Paths for Part 9 Buildings: As-Built form* here: https://energystepcode.ca/for-industry