

Bulletin: Energy Step Code Requirements

Part 9 Residential Buildings



Bulletin # 18-03

Updated: Sep 12, 2023

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This bulletin is for informational purposes only. Please be sure to consult the relevant City of Kelowna bylaw.

If any contradiction between this guide and the relevant Municipal Bylaws and/or applicable codes is found, such bylaw and/or codes shall be the legal authority.

Purpose

To inform staff, building contractors and the public of the City of Kelowna's Energy Step Code ("Step Code") requirements for Part 9 residential buildings beginning June 1, 2021.

Background

Step Code is a performance-based approach to support a market transformation to net-zero energy ready buildings by 2032 in BC. Each step to net-zero energy ready buildings (five steps for Part 9 buildings) is set out through a series of increasingly stringent requirements for envelope efficiency, equipment efficiency, and airtightness compared to the base BC Building Code (BCBC).

Step Code involves the services of an energy advisor (EA) to review plans, model energy consumption, conduct airtightness testing, and to verify the home complies with the energy performance requirements of a given step. You can find a local EA at:

<https://betterhomesbc.ca/ea/>.

All Steps require an airtightness test (i.e., blower door test) at project completion. A mid-construction (pre-drywall) airtightness test is recommended to facilitate the correction of any air barrier deficiencies before final construction.

Additional information is provided on the Provincial Step Code website: energystepcode.ca.

Requirements and Incentives in Kelowna

Part 9 buildings must be designed and constructed in compliance with the following steps:

Building Type	Building permit application filed on or after June 1/21
Part 9 residential buildings (all archetypes)	Step 3

The City of Kelowna offers Building Permit rebates for Part 9 residential buildings:

- \$325 mid-construction airtightness test incentive*

FortisBC also offers rebates for new Part 9 residential buildings, details available at fortisbc.com/rebates/home/new-home-program.

Further details on Step Code in Kelowna can be found at kelowna.ca/energystepcode.

* Available for a limited time; maximum three per incentive per builder.

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Requirements Checklist

The following tables provide a summary of the requirements for Step Code compliance in Kelowna.

GENERAL REQUIREMENTS

<input type="checkbox"/>	BC Energy Compliance Reports must be completed by an Energy Advisor (EA) , who is registered and in good standing with NRCan . EAs are encouraged to use the EnerGuide Rating System (ERS) pathway.
<input type="checkbox"/>	EAs must use the most recent Compliance Report Calculator and Report Generator found at: https://energystepcode.ca/compliance-tools-part9/ .
<input type="checkbox"/>	Degree Days Below 18°C (HDD) must equal 3715 in the Compliance Report Calculator and Report Generator.
<input type="checkbox"/>	EAs using the ERS pathway must submit the P and N files to NRCan using the program identifier " KELESC " for Info ID #2.

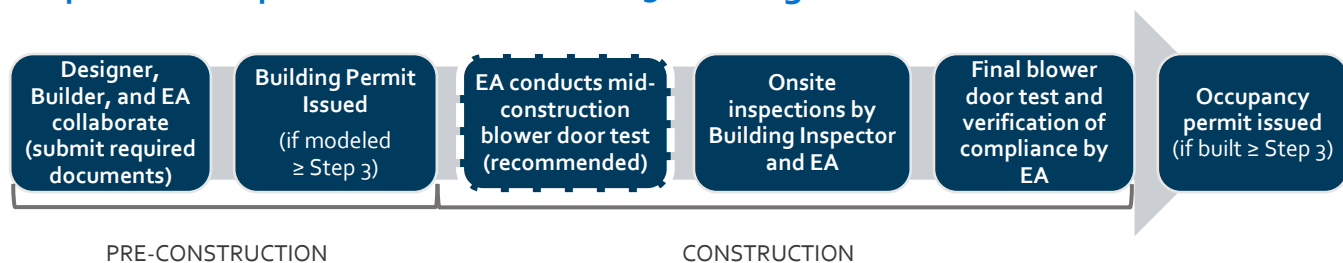
SUBMISSION REQUIREMENTS - AT TIME OF BUILDING PERMIT APPLICATION

<input type="checkbox"/>	Drawing(s) including a statement on the first page indicating the Step pursued. Drawings submitted must be the version used for energy modelling and the compliance report.
<input type="checkbox"/>	BC Energy Compliance Report (Pre-Construction):
<input type="checkbox"/>	<ul style="list-style-type: none"> Must include the statement "<i>the undersigned has verified that the project complies with subsection 9.36.5/9.36.6 of Division B, as detailed in the most current version of the BC Building Code</i>" and a signature from the EA who completed the modelling/report.
<input type="checkbox"/>	<ul style="list-style-type: none"> All relevant fields must be completed, including "Supplementary Information".
<input type="checkbox"/>	<ul style="list-style-type: none"> In Section D ("9.36.6. Energy Step Code Compliance") the 'Required' and 'Proposed' Step Code Level must be at least Step 3.
<input type="checkbox"/>	If accessing the mid-construction blower door test rebate (\$325): <ul style="list-style-type: none"> The applicant must indicate so <u>at the time of building permit application</u>. <u>Refunds will not be issued</u> at a later date even if one of the rebate milestones is achieved. The applicant must email relevant compliance documents to energystepcode@kelowna.ca for proof of completion: (1) a Mid-Construction BC Standard Verification Report completed by the EA.

SUBMISSION REQUIREMENTS - PRIOR TO ISSUANCE OF OCCUPANCY PERMIT

<input type="checkbox"/>	BC Energy Compliance Report (As-Built):
<input type="checkbox"/>	<ul style="list-style-type: none"> Must include the statement "<i>the undersigned has verified that the project complies with subsection 9.36.5/9.36.6 of Division B, as detailed in the most current version of the BC Building Code</i>" and a signature from the EA who completed the modelling/report.
<input type="checkbox"/>	<ul style="list-style-type: none"> All relevant fields must be completed, including "Supplementary Information"
<input type="checkbox"/>	<ul style="list-style-type: none"> In Section D (9.36.6. Energy Step Code Compliance) the 'Required', 'Proposed', and 'As-Built' Step Code Level must be at least Step 3.
<input type="checkbox"/>	<ul style="list-style-type: none"> If using the ERS pathway, the P and N file numbers must be provided in Section E ("Completed By")
<input type="checkbox"/>	EnerGuide Homeowner Information Sheet (if using the EnerGuide Rating System)

Step Code Compliance Process for Part 9 Buildings



Non-compliance with Step Code

The City of Kelowna currently provides Building Permit rebates valued at \$325 for mid-construction airtightness testing in Part 9 residential buildings (see page 1 for details). Rebates are provided to ***help with the education of builders, designers, and contractors, and to prevent potential failure at occupancy stage.***

The City of Kelowna relies on the collective effort of Energy Advisors, builders, and designers to achieve the targeted compliance, as committed as condition for Building Permit issuance. Step Code compliance at the occupancy permit stage is the responsibility of the Energy Advisor and the licensed builder.

Where a Part 9 building or structure, as constructed, does not meet the performance requirements of the applicable step of the Step Code, all reasonable remedial measures must be taken to meet the minimum Step Code requirements in effect in the City of Kelowna.

Where the builder can demonstrate that all reasonable remedial measures were taken, and the building or structure still does not meet the performance requirements of the applicable step of the Step Code, the Building Official may issue an Occupancy Permit where all the following additional requirements are met:

- The building or structure meets Energy Efficiency Requirements set out in Part 9 of the Building Code (prescriptive or performance path), or under exceptional circumstances, the Building Inspector has accepted an Alternative Solution as set out in the Building Code
- Completion of a second post-construction blower door test is conducted by licensed Energy Advisor after remedial measures
- Submission of two (2) as-built BC Energy Compliance Reports completed by the Energy Advisor, indicating results from before and after remedial measures. The Report completed after remedial measures should clearly indicate what remedial measures were taken and document the energy efficiency outcomes of those measures.
- The builder will be required to complete a mandatory mid-construction “BC Standard Verification Report” on their next building permit.