



BC Energy Step Code Requirements for Part 9 Buildings

Building Division

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Single-Detached, Semi-Detached, Laneway Homes, Townhomes

Port Moody Requirements

The table below outlines Port Moody's Energy Step Code requirements for Part 9 buildings.

Building Type	Building Permit application filed on or after January 1, 2020
Single detached, semi-detached, townhomes, and other Part 9 residential buildings	Step 1

The table below outlines Port Moody's anticipated future Energy Step Code requirements for Part 9 buildings that Council has committed to. Builders, developers and designers are encouraged to consider these potential future requirements.

Building Type	Current Requirements	2021	2025	2030
Single detached, semi-detached, townhomes, and other Part 9 residential buildings	Step 1	Step 3	Step 4	Step 5

Compliance Pathways

All building permit applications for new single and semi-detached buildings must demonstrate compliance with either the EnerGuide Rating System 9.36.6 or 9.36.5 pathways listed in the Compliance Pathway Requirements table below.

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

Compliance Pathways at Building Permit Stage	
9.36.6: EnerGuide Rating System: Licensed Energy Advisor <small>*The City's preferred pathway</small>	9.36.5: Registered Professional required

Documentation

Along with other documentation required at each stage, the following documentation must be submitted related to the Energy Step Code:

Building Permit Application	Mid-Construction	Final Building Inspection
1. Pre-Construction Compliance Verification Form completed by a licenced Energy Advisor.*	1. Mid-Construction Verification Report	1. As-Built Compliance Verification Form completed by a licenced Energy Advisor.*

Documentation

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Building Permit Application	Mid-Construction	Final Building Inspection
2. Printed copy of HOT2000 Full House report (or alternative energy model reports if following 9.36.5) for both the proposed and reference buildings. **		2. Revised printed copy of HOT2000 Full House report (or alternative energy model reports if following 9.36.5) for both the proposed and reference buildings. ***
3. Printout of an email from the Energy Advisor's Service Organization acknowledging receipt of the "p-file" corresponding to the HOT2000 Full House Report.		3. Printout of an email from NRCan accepting the HOT2000 "n-file" energy model corresponding to the as-built HOT2000 Full House Report.
4. Plan drawings clearly showing all energy efficiency upgrades and type of air barrier.		4. Proof of a home energy label affixed on or near the electrical panel.

*If following 9.36.5 compliance path, the Pre-Construction and As-Built forms must be completed by a Registered Professional who is a Qualified Modeller (QM) or overseeing a QM in the role of Energy Modelling Supervisor (EMS).

** In defining model assumptions, view Building Bylaw No. 3200 for property specific climate data.

*** The model must incorporate the post-construction blower door test result in the HOT2000 "n-file" energy model.

Mid-Construction Airtightness Test Requirements

All Part 9 buildings must complete a mid-construction blower door test prior to Pre-Drywall Inspection.

The following requirements must be completed at the pre-drywall stage of construction:

1. An airtightness test must be completed at the pre-drywall stage. The test must be conducted by an Energy Advisor or a Registered Professional.
 - a. You will be required to improve the airtightness and/or energy performance of the building if a pre-drywall blower door test result is more than 1.5 ACH50 above the proposed value in the energy compliance report OR there are sub-standard energy-efficiency upgrades.
 - b. A second pre-drywall airtightness test and/or new verification report may be required.
2. The Mid-Construction Verification Report must be completed by the Energy Advisor or Registered Professional, indicating pre-drywall airtightness test results and verification of all building energy efficiency upgrades. The Mid-Construction Verification Report must be submitted and accepted by the building official prior to drywall installation.

Note: The building inspector must be provided two days advance notice of a scheduled blower door test so that they may choose to attend this test.

Home Energy Labelling

As an administrative requirement for occupancy, the City of Port Moody requires that an energy label be affixed on or next to the electrical panel in each housing unit where an electrical panel is present.

The following energy labels are acceptable:

- EnerGuide Rating System energy label
- Passive House Certificate
- A comparable energy label including all required information outlined below.

A comparable energy label can be used when:

- Energy modellers using software tested in accordance with ANSI/ASHRAE 140 Evaluation of Building Energy Analysis Computer Programs.
- Energy advisors not registered with the EnerGuide Rating System use HOT2000 to model a home and produce a BC Energy Compliance Report.
- Registered energy advisors using HOT2000 but are unable to produce a formal EnerGuide Rating System home energy label. (e.g. when energy advisors use HOT2000 to model a townhome or row home as-a-building rather than as a unit). Note also that when EnerGuide Rating System energy advisors are using alternate energy modelling and blower door testing procedures they are not able to produce an EnerGuide home energy label.

Comparable energy labels must include the following information:	
Address	<ul style="list-style-type: none"> • The street address of the home.
Modeller	<ul style="list-style-type: none"> • The date that the evaluation was conducted. • The company name and name of energy modeller that conducted the evaluation. • The name of the entity that provides quality assurance.
Energy Rating	<ul style="list-style-type: none"> • Energy Rating: Energy consumption of the home in GJ per year, including baseloads.
Reference House Energy Rating	<ul style="list-style-type: none"> • Reference house energy consumption in GJ per year, with baseloads.
Energy Metrics	<ul style="list-style-type: none"> • Rated Annual Energy Consumption: Energy consumption GJ per year, broken down by fuel type (Natural Gas, Electricity, Oil, and Propane). • Breakdown of Rated Annual Energy Consumption by system: Percentage of <ul style="list-style-type: none"> – Total energy consumption GJ per year by end use (space heating, space cooling, water heating, ventilation, lights & appliances, and other electrical) • Rated On-site Renewable Energy Contributions: Energy generated annually from onsite renewable sources (solar PV, wind, solar hot water). • Rated Energy Intensity: Measured in gigajoules per square meter per year. • Rated Greenhouse Gas Emissions: Annual amount of greenhouse gases emitted in tonnes/year. • Total Heated Floor Area: The total usable heated floor area of the building unit, including all above-grade heated areas regardless of ceiling height, and all below-grade heated areas with a ceiling height of more than 1.2m (i.e. basements).

For further information, please contact the Building Department at buildingpermits@portmoody.ca.