

Guide

Green Building Requirements -
Residential Rental Tenure Development
Applications in C-2, C-2B, C-2C and C-2C1 Districts
Submitted Prior to March 15, 2023

March 15, 2023

Intent

This guide outlines green building performance and submission requirements for residential rental tenure development applications in C-2, C-2B, C-2C and C-2C1 districts that were submitted between February 12, 2022 and March 15, 2023.

Performance Requirements

Previous C-2, C-2B, C-2C and C-2C1 green building requirements for residential rental tenure developments¹ set out two options for compliance:

- i. certification under the Passive House standard set by Passive House International (PHI), or the Zero Energy standard set by the International Living Future Institute (ILFI), or,
- ii. energy and emissions intensity limits in accordance with the following table for all dwelling uses, except for Seniors Supportive or Assisted Housing²:

| Low Carbon Energy System (LCES) connection, as per the LCES Policy ³ | Total Energy Use Intensity (TEUI): kWh/m ² | Thermal Energy Demand Intensity (TEDI): kWh/m ² | Greenhouse Gas Intensity (GHGI): kgCO ₂ e/m ² |
|---|---|--|---|
| No | 100 | 15 | 3 |
| Yes | 110 | 25 | 3 |

Compliance with the energy and emissions intensity limits in (ii) must be demonstrated using an energy model created in accordance with the latest version of the City of Vancouver Energy Modelling Guidelines.

The Director of Planning may vary the requirements under (ii), provided the Director of Planning is satisfied that sustainability objectives have been achieved on the development site.

Submission Requirements

Applications with multiple buildings should separate out the buildings where possible, and identify the pathway (i or ii) and requirements for each building in the application.

i. Certification under the Passive House or ILFI Zero Energy Standards

As part of the development permit application, applicants must provide:

- A brief design strategy that identifies the standard and identifies the design elements proposed to meet the standard on the application drawings.

¹ The green building requirements (pathway i or ii) only apply to a residential building or portions of a building, as defined by of Group C major occupancy (Residential, except Hotel and Motel) in the Building By-law

² Seniors Supportive or Assisted Housing determined to be Group B (Care) major occupancy under the Building Bylaw is exempt from the green building requirements of this section.

³ [Low-Carbon Energy Systems Policy](#)

- **For Passive House applications, the Certified Passive House Consultant/Designer (CPHC/D) must submit:**
 - a letter confirming that they have been engaged to do energy modelling and advise on the project;
 - a compliant, completed pre-construction PHPP model (electronic copy of the Excel file);
 - a PDF copy of the completed “verification” page with relevant notes, signed by a CPHC/D; and,
 - a memo providing modelling input values for the PHPP.
- **For Zero Energy applications, a qualified green building consultant must submit:**
 - a letter confirming that they have been engaged to advise on the project;
 - confirmation of registration with ILFI’s Zero Energy Certification; and,
 - proof of an established energy target and a narrative as to how this target will be achieved, including strategies around energy efficiency, electrification of building systems, and on-site renewable energy generation.
- For applications using the exclusion of floor area occupied by heat recovery ventilators and connected shafts under section 10.33.3 of the Zoning and Development By-law, additional material is required as noted in the Guidelines for the Administration of Variances in Larger Zero Emission Buildings.
- A letter of commitment by the owner to complete the steps set out in the selected standard, including registration, certification, or labeling. For Passive House applications, provide a letter of commitment to certify the building through Passive House International.
- In addition to the overheating criteria contained within the standards, buildings that do not incorporate mechanical cooling must demonstrate compliance with Section 4, Passively Cooled Buildings, in the City of Vancouver Energy Modelling Guidelines. This must be demonstrated using an hourly energy simulation of the critical zones where the risk of overheating is greatest, as determined by the energy modeler. The conditions of at least two zones must be modelled and reported.

ii. Energy and emissions intensity limits

As part of the development permit application, Applicants must provide:

- A preliminary Zero Emissions Building Plan (ZEBP) Energy Checklist (latest version); and,
- A 2-4 page summary of detailed energy model inputs for detailed review.

More Information

Superseded versions of the C-2 district schedules for in-stream development permit applications accepted before March 15, 2023:

- [C-2](#)
- [C-2B](#)
- [C-2C](#)
- [C-2C1](#)

Passive House and Zero Energy standards, related policies and regulations, and a glossary of terms, see: [Guidelines for the Administration of Variance in Larger Zero Emission Buildings](#).

Zero Emissions Building Plan and related policies: www.vancouver.ca/zeroemissions.

For questions or comments related to the administration of the Zero Emissions Building Plan and related policies contact green.buildings@vancouver.ca.